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ABSTRACT

This preliminary directory represents the offerings of 45 software suppliers and information about instructional software currently available for three microcomputers widely used in schools. It is geared towards a wide variety of users including school planners contemplating microcomputer acquisition, teachers planning courses and curricula, media center personnel, schools of education, and home computer users. The directory is organized as follows: (1) software descriptions in sequence by school department, subject, and lowest grade level; (2) summary listings of software for individual hardware systems, in the same sequence as the first section; (3) an alphabetical listing of software suppliers and their addresses; and (4) a glossary of terms used. Software descriptions include the program name, department, subject, grade level range, program type, and functional description, as well as intended hardware system(s), source, and retail price. The summary listing contains only the program name, grade level range, functional description, and an identification number which refers back to the more complete entry in the first section. (Author/MER)

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SCHOOL MICROWARE

ED196431

A DIRECTORY OF EDUCATIONAL SOFTWARE

Over 500 programs/ packages for

APPLE , PET, TRS-80*

ALL GRADES, MOST SUBJECTS

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Robert N. Haven

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

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TABLE OF CONTENTS

INTRODUCTION 1

Who Needs School MicroWare? 1
Organization 1
How to Use This Directory 1
Software Evaluation 1
Feedback Needed 2

SOFTWARE DESCRIPTIONS 3

SUMMARY LISTING BY HARDWARE SYSTEM 25

Apple II Software 26
Commodore PET Software 30
Radio Shack TRS-80 Software 38

SOFTWARE SUPPLIERS 47

GLOSSARY 48

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INTRODUCTION

Today, School MicroWare is a directory of programs to support teaching and learning for use on the three microcomputers most widely used in schools today: the Apple II, the Commodore PET, and the Radio Shack TRS-80 Model I. It represents the offerings of 45 software suppliers. Its contents have been selected without attempt to evaluate the programs listed. Listing of a particular microcomputer program in School MicroWare is in no way an endorsement of that product by Dresden Associates.

In the months ahead, School MicrWare will grow. Many more programs and packages from current and new sources will be added. Software for other microcomputer systems will be introduced. Our concern for software quality will be reflected in the inclusion of ideas and tools to help improve the over-all quality of programs offered for sale. In short, School MicroWare will become a comprehensive source of information about instructional software available for all micro's widely used in schools.

WHO NEEDS SCHOOL MICROWARE?

School MicroWare (sometimes abbreviated here as SMW) will be useful in many different situations, but especially in schools. School planners contemplating micro acquisition but uncertain about the availability of software will find ample evidence in SMW that, indeed, there is a vast array of programs available. Teachers planning courses and curricula will find our directory a handy reference for identifying those topics whose teaching could be easily supported by computer use as well as for locating programs/packages to be ordered. Special education teachers will note that School MicroWare is a particularly rich source of new tools to assist them in providing interesting, stimulating, and effective learning environments. Likewise, media center personnel whose responsibilities include management of instructional computing will find it useful in locating materials to be acquired.

In a related area, SMW will be quite useful to schools of education for planning and implementing programs to support school use of microcomputers. It also should be helpful to software evaluators as a point of departure in defining their universe of operation.

In other areas, home computer users may turn to School MicroWare as a bountiful source of ideas for concrete uses of their systems. Likewise, here they will find software to help realize those ideas. On the commercial side of things, SMW will be welcome to computer store personnel as a means of helping their clients apply their products to teaching/learning tasks in many varied environments.

ORGANIZATION OF SCHOOL MICROWARE

School MicroWare is organized as follows: First, software descriptions in sequence by school department, subject, and lowest grade level; second, summary listings of software for individual hardware systems, in the same sequence as the first section; third, an alphabetical listing of software suppliers and their addresses; and finally, a glossary of terms used.

Entries in the Software Description section are the most complete, containing program name, department, subject, grade level range, program type, and functional description, as well as intended hardware system(s), source, and retail price. The entries in the Summary Listing by Hardware System contain only program name, grade level range, functional description, and an identification number which refers back to a more complete entry in the first section.

HOW TO USE THIS DIRECTORY

Users who are interested in finding software for particular curriculum areas, irrespective of hardware system, should go directly to the Software Description section which immediately follows this introduction. Users who are interested only in software for a particular hardware system may wish to first consult the applicable part of the Summary Listing section and then go to the Description section. Instructions for use are given at the beginning of these two sections. The

addresses of suppliers named in the first section will be found in the Software Suppliers section.

SOFTWARE EVALUATION

As can be seen from the number of entries included in this volume, there is a great deal of instructional software available for microcomputers. Some of this material is excellent, and more might be termed adequate. Unfortunately, some of it is poor.

In its present form, School MicroWare goes a long way toward identifying and classifying existing software. A more important and bigger job remains to be done which will help tremendously to improve the over-all quality of software offered for sale. This tasks consists of setting quality standards for instructional software, evaluating existing programs and packages, and making the results of these evaluations widely available.

School MicroWare intends to assist in this task and will ask its readers to become involved in this effort in the near future. One of this year's update editions will contain a convenient check-off sheet for use in evaluating software. We will ask those readers who wish to become involved to complete some of those sheets and return them to us. The contents of these sheets will be compiled and published annually as a separate document. Contributors will receive a significant discount on the price of this new publication.

In the meantime, our readers should be apprised of the excellent efforts already underway in the software evaluation area. One of the most significant of these is MicroSIFT, a federally funded project of the Northwest Regional Education Laboratory, 710 S.W. Second Ave., Portland, OR 97204. This project has set up a nationwide network to collect, evaluate, and disseminate instructional software. Other organizations involved in evaluating instuctional software are:

- o Apple Education Foundation, 20605 Lazaneo Drive, Cupertino, CA 95014
- o CONDUIT, P.O. Box 388, Iowa City. IA 52244
- o Electronic Data Systems Corp., 14580 Midway Road, Dallas TX 75234 (attn: Portia Isaacson)
- o Elementary and Secondary School Subcommittee of the ACM, c/o David Moursund, Dept. of Computer & Info. Science, Univ. of Ore., Eugene, OR 97403
- o Project LOCAL, 200 Nahatan St., Westwood, Mass. 02090
- o Technical Education Research Centers, 8 Eliot St., Cambridge Mass. 02138

These organizations may be contacted to determine the exact nature of their current evaluation efforts.

In addition to the agencies just listed, a few magazines and journals regularly carry evaluations of programs useful in teaching and learning. These include: Creative Computing, COMPUTE, and The Computing Teacher.

FEEDBACK NEEDED

We want to make School MicroWare as useful as possible to our readers. We would appreciate your help in improving it. Please send us your thoughts about what you would like to see (or not to see). We will try to be as responsive as possible.

SOFTWARE DESCRIPTIONS

This section contains the most complete information about programs and packages. A package is simply a collection of programs which are combined for purposes of distribution and which usually cannot be purchased separately. In order to save valuable space, abbreviations have been used extensively in this and the following section.

An excerpt from a page in the Software Description section is shown below. Note that there is a heading indicating continuation from the preceding column of the department SOCIAL SCIENCE and subject CURRENT EVENTS. The number above and to the right of the software entry (17605) is an identifier which appears at the top of each column in this section. It refers to the first entry in the column and may be used when referring to this section from the Summary Listing.

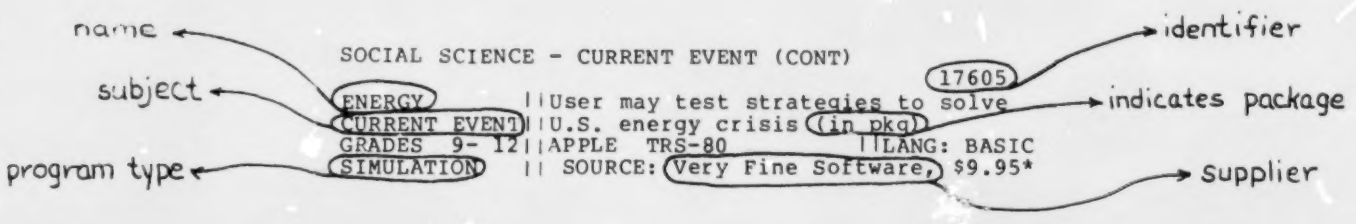
Referring to the descriptive entry itself, note that four items are listed on the left-hand side: name (ENERGY), subject (CURRENT EVENT), grade level range (9 - 12), and program type (SIMULATION). In many cases, program names have been abbreviated from the forms used by suppliers. However, the full names should be readily identifiable in suppliers' literature. Program types are defined in the Glossary.

A functional description appears on the first two lines to the right of name and subject. Wherever applicable, this description includes an indication of whether the software being described is part of a package which must be purchased in its entirety (note phrase "in pkg.") Descriptions also state whether the subject software requires a disk drive in the hardware configuration on which it is to be run; this is indicated by the word "disk," sometimes abbreviated as "dsk." If disk is not called for, the item is distributed on cassette tape, and disk is not required for operation.

The third entry line gives the hardware system(s) on which the program/package operates. All TRS-80 software is for Model I. If a disk is not required, memory requirements are usually 16K or less for Apple and TRS-80, and 8K for PET. The minimum memory requirement for disk systems is usually 32K. However, readers are urged to carefully verify hardware requirements in supplier literature before ordering.

The programming language in which a piece of software is written also is included in the third line of an entry. The reader should consider this information in order to ensure that the proper language processor is available on his or her computer. For example, one cannot run a program written in PILOT unless one has available the correct PILOT interpreter. Most programs included here are written in BASIC and will run in machines equipped with one or another of the interpreters supplied by the manufacturers. In particular, all TRS-80 software described here as written in BASIC and supplied on cassette will run in Level II BASIC. Some also may be supplied for Level I. Again, one should refer to suppliers' literature to ensure that the correct language processor is available.

In addition to program type, the bottom line of each entry contains a source from which the software may be purchased and a recent retail price for the item. To find out how to contact the supplier, refer to the Software Suppliers section. Although School MicroWare will attempt to keep listed prices current, one should confirm prices with the supplier. Note that in the sample entry, an asterisk appears to the right of the price. This refers to a footnote which explains that this price is for a package which also includes other programs; usually one must purchase the entire package to obtain the program described.



01025

BUSINESS - ACCT'G/BOOK'G

ACCOUNTINGI ||Provides basic accounting concepts
ACCT'G/BOOK'G||including double entry -w/ graphics
GRADES 9- 12 ||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Micro Learningwa[illegible], $5.95

T-ACCOUNTS ||Practice in posting 10 transactions
ACCT'G/BOOK'G||to T-accounts
GRADES 9- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Robert Baker, $50

GEN LEDGER ||Provides practice in using account-
ACCT'G/BOOK'G||ing without drudgery of hand work
GRADES 10- 12||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Learningware, $5.95

ACCOUNTING2 ||Introduces journals, ledgers, and
ACCT'G/BOOK'G||financial statements -graphics used
GRADES 10- 12||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Micro Learningware, $5.95

DEPRECIATE ||Calculates depreciation by three
ACCT'G/BOOK'G||methods; also displays schedule
GRADES 10- 12||TRS-80 PET ||LANG: BASIC
COMP SUPPORT || SOURCE: Micro Learningware, $5.95

BUSINESS - BUSINESS MATH

BANK ||Shows princ's installment buying,
BUSINESS MATH||long-term loans, sav'g acct -in pkg
GRADES 7- 11 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $14.95*

RULE OF 78 ||Calculates inter due by Rule of 78
BUSINESS MATH||on premature loan payment (on disk)
GRADES 9- 12 || APPLE ||LANG: BASIC
SIMULATION || SOURCE: LNS Software, $2.95

SAVINGS ||Finds bal'c of sav acct for yearly
BUSINESS MATH||investm't or mthly deposit -in pkg
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $14.95*

LOAN ||For instal loan, finds mthly inter,
BUSINESS MATH||payment & balance due (in pkg)
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $14.95*

BANK RECON ||Program reconciles a bank statement
BUSINESS MATH||given balances, checks, and charges
GRADES 9- 12 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Micro Learningware, $5.95

LOAN AMORT ||Complete loan analysis program -all
BUSINESS MATH||loan related options available
GRADES 10- 12||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Micro Learningware, $5.95

ANNUITIES ||Calculates am't that can be accum-
BUSINESS MATH||ulated with an initial investment
GRADES 10- 12||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Micro Learningware, $5.95

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* Price of package including this program.

01046

BUSINESS - BUSINESS PRNC

MARKET ||Teams make small co, marketing de-
BUSINESS PRNC||cisions (prod lvl, adv, price) -pkg
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

MARKET ||2 teams compete in bike sales; man-
BUSINESS PRNC||age advert, prod lvl, prices-in pkg
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $14.95*

BUSINESS - DATA PROC'NG

COBOL ||Compiles, runs COBOL progs; enables
DATA PROC'NG ||teach'g this lang on micro -on disk
GRADES 9- 12 ||TRS-80 ||LANG: Machin
LANG PROCES'R|| SOURCE: Business Microprod, $99.95

BUSINESS - TYPING

MICROTYPING ||Practice typing; choice of 9 speeds
TYPING ||and number of errors allowed
GRADES 4- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Hayden Book Co., $10.95

TYPING ||Provides typing practice; includes
TYPING ||time response monitoring
GRADES 4- 12 ||TRS-80 APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Microsoft, $14.95

TYPING ||Series of programs providing drill,
TYPING ||instruction in touch typing -on dsk
GRADES 4- 12 || APPLE ||LANG: BASIC
TUTORIAL ||SOURCE: Cool 's Computer Co., $14.95

TYPING TCHR ||Provides typing practice; initial
TYPING ||familiarization thru keys mastery
GRADES 4- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Instant Software, $7.95

PROTYPE ||Teaches typists to produce 55wpm in
TYPING ||1/3 time of traditional instruction
GRADES 6- 12 ||TRS-80 PET APPLE ||LANG:
TUTORIAL || SOURCE: American Ana[illegible]y's, $n/av

COMPREHENSIVE

TEACHER ||Teacher enters quest's & answers;
||computer prepares tests & quizzes
GRADES 1- 12 ||TRS-80 ||LANG: BASIC
TEACHER AID || SOURCE: Instant Software, $9.95

FREQ DIST ||Displays bar graph giving frequency
||distribution of grades
GRADES 1- 12 ||TRS-80 ||LANG: BASIC
TEACHER AID || SOURCE: Project LOCAL, $4

COMPREHENSIVE (CONT)

03001

APPLE PILOT -- ||CAI author language; write teaching ||materials, any level (on disk)
GRADES 1- 12 || APPLE ||LANG: PILOT
AUTHOR LANG || SOURCE: Cook's Computer Co., $25

GRADEBOOK ||Maintains student records on disk; ||reports on class or student(s)
GRADES 1- 12 || APPLE ||LANG: BASIC
TEACHER AID || SOURCE: Creative Computing, $24.95

READABILITY ||Determine readibility of text based ||on word/sent length, word diffic'ty
GRADES 1- 12 ||TRS-80 PET ||LANG: BASIC
TEACHER AID || SOURCE: Educat'l Activit's, $9.95

GRADE AVGS ||Input num or letter grades to get ||average, rank, & summary of grades
GRADES 1- 12 ||TRS-80 PET ||LANG: BASIC
TEACHER AID || SOURCE: Educat'l Activit's, $9.95

WORD SEARCH ||Teacher types any 8 word categor's, || players pick matching categories
GRADES 1- 12 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $30

CAIWARE ||Facilitates writing tutorial, prac- ||tice materials on any subject
GRADES 1- 12 ||TRS-80 ||LANG: BASIC
AUTHOR LANG || SOURCE: Fireside Computing, $24.95

STATAL ||Computes mean, median, & standard ||deviation for a set of nos. -in pkg
GRADES 1- 12 ||TRS-80 ||LANG: BASIC
TEACHER AID || SOURCE: Project LOCAL, $15.95*

READING ANL ||Program analyzes and reports diffi- || culty level of reading material
GRADES 1- 12 ||TRS-80 ||LANG: BASIC
TEACHER AID || SOURCE: Micro Learningware, $5.95

CAI + VTR ||CAI and videotaped teaching combine ||to teach and drill on any topic
GRADES 1- 12 || APPLE ||LANG: Machin
AUTHOR LANG || SOURCE: CAVRI Systems, $90

MASTR LES'N ||Drills,tests/scores any subj; many ||les'ns av'labl;see also LES'N BUILD
GRADES 3- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Carta Associates, $30

TUTOR BLDR ||Facilitates development of tutorial ||(CAI) programs (on disk)
GRADES 3- 12 || APPLE ||LANG: BASIC
AUTHOR LANG || SOURCE: LNS Software, $19.95

LES'N BUILD ||Enables user to create drills, ||tests for use with MASTR LES'N prog
GRADES 3- 12 ||TRS-80 ||LANG: BASIC
TEACHER AID || SOURCE: Carta Associates, $40

WAR QUIZ ||Quiz on Revolutionary War which can ||be modified for any topic
GRADES 3- 12 ||TRS-80 PET ||LANG: BASIC
ROTE DRILL || SOURCE: Micro Learningware, $5.95

VIDEO EDITR ||Helps prepare CAI w/ audio & video ||from video tape (on disk)
GRADES 2- 12 || APPLE ||LANG: BASIC
AUTHOR LANG || SOURCE: Whitney Educ Serv, $n/av

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* Price of package including this program.

COMPREHENSIVE (CONT)

03002

STUDY DRILL ||Create a study drill for any sub- ||ject by entering questions& answers
GRADES 3- 12 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Creative Computing, $14.95

SCRIPSIT ||Text edit, reformat w/ min manual ||effort; excel for reports -on disk
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
TEXT PROCES'R|| SOURCE: Radio Shack, $99

WORDSTAR ||Text edit, reformat w/ min manual ||effort; excel for reports -on disk
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
TEXT PROCES'R|| SOURCE: MicroPro, $500

TEXT PROCES ||Text edit, reformat w/ min manual ||effort; excel for reports -ptr requ
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
TEXT PROCES'R|| SOURCE: Creative Computing, $14.95

TEXT PROC ||Text edit, reformat w/ min manual ||effort; excel for reports -on disk
GRADES 7- 12 || APPLE ||LANG: BASIC
TEXT PROCES'R|| SOURCE: Chas. Mann & Assoc, $69.95

SAP ||Does statis'l analy's of survey re- ||sults; for stud't projs (in pkg)
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
COMP SUPPORT || SOURCE: Project LOCAL, $15.95*

COMPREHENSIVE - BASIC SKILLS

MEM-BUILDER ||A series of educ games to improve
BASIC SKILLS ||memory,attn span, and concentration
GRADES 2- 6 ||TRS-80 PET APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Program Design Inc, $14.95

APPLE DIALG ||Orients novice user to keyboard in-
BASIC SKILLS ||teraction with Apple comp (on disk)
GRADES 7- 12 || APPLE ||LANG: BASIC
CONCEPT DEMO || SOURCE: LNS Software, $2.95

COMPREHENSIVE - STATISTICS

BAR GRAPH ||Plots bar or line graph for up to
STATISTICS ||six categories (in pkg)
GRADES 4- 12 ||TRS-80 ||LANG: BASIC
COMP SUPPORT || SOURCE: Creative Computing, $7.95*

COMPUTER SCIENCE/LITERACY - BASIC SKILLS

BDAY ANAL ||Program gives statistics about a
BASIC SKILLS ||person based on date of birth
GRADES 3- 6 ||TRS-80 ||LANG: BASIC
CONCEPT DEMO || SOURCE: Micro Learningware, $5.95

INTRO MICRO ||Six programs which help students
BASIC SKILLS ||acquire computer literacy skills
GRADES 3- 9 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Mentor Software, $54.95

COMPUTER SCIENCE/LITERACY - BASIC SKILLS (CONT)

04012

KEYBOARD BASIC SKILLS GRADES 3- 6 EDUC'L GAME
Warm-up exercise to familiarize beginning users with keyboard -in pkg
TRS-80 LANG: BASIC
SOURCE: Project LOCAL, $10.95*

ELIZA BASIC SKILLS GRADES 5- 12 CONCEPT DEMO
Computer plays psychoanalyst and responds to your input (in pkg)
PET LANG: BASIC
SOURCE: Creative Computing, $7.95*

COMPUTER SCIENCE/LITERACY - COMPUTER PROG

VIC COMPUTER PROG GRADES 7- 12 SIMULATION
Simul's simple computer for learning of machine lang, internal ops
TRS-80 LANG: BASIC
SOURCE: Carta Associates, $20

APL-80 COMPUTER PROG GRADES 7- 12 LANG PROCES'R
Processes, runs APL progs; enables teaching this lang on micro -on dsk
TRS-80 LANG: Machin
SOURCE: The Software Exch, $49.95

BASIC TCPAC COMPUTER PROG GRADES 7- 12 TUTORIAL
Programs which teach both Integer and Applesoft BASIC (on disk)
APPLE LANG: BASIC
SOURCE: Chas. Mann & Assoc, $49.95

BASIC TCHR COMPUTER PROG GRADES 7- 12 TUTORIAL
13 lessons which teach Integer BASIC; includes tests, index, probs
APPLE LANG: BASIC
SOURCE: Chas. Mann & Assoc, $19.95

TEACHINGPAC COMPUTER PROG GRADES 7- 12 TUTORIAL
Teaches Integer, Applesoft BASIC; w/ float'g point dictionary -on dsk
APPLE LANG: BASIC
SOURCE: Chas. Mann & Assoc, $59.95

TEACHERPLUS COMPUTER PROG GRADES 7- 12 TUTORIAL
Program for teaching Applesoft II BASIC; conversational approach
APPLE LANG: BASIC
SOURCE: Chas. Mann & Assoc, $24.95

STEP BYSTEP COMPUTER PROG GRADES 8- 12 TUTORIAL
32 progs with workbook; teaches a beginner BASIC language (on disk)
TRS-80 PET APPLE LANG: BASIC
SOURCE: Program Design Inc, $39.95

COBOL COMPUTER PROG GRADES 9- 12 LANG PROCES'R
Compiles, runs COBOL progs; enables teach'g this lang on micro -on disk
TRS-80 LANG: Machin
SOURCE: Business Microprod, $99.95

ENGLISH - BASIC SKILLS

LEARN READ BASIC SKILLS GRADES K- 4 ROTE DRILL
Given a word, child matches correct picture from accompany'g pg -in pkg
TRS-80 LANG: BASIC
SOURCE: Jensen Software, $9.95*

COLETT BASIC SKILLS GRADES K- 1 SKILLS PRACT
Counting and recognizing letters which are displayed on screen
PET LANG: BASIC
SOURCE: Project COMCAL, $10

ENGLISH - BASIC SKILLS (CONT)

06011

U-SPELL BASIC SKILLS GRADES 1- 12 ROTE DRILL
Allows teacher to create audio enhanced spelling drill
TRS-80 APPLE LANG: BASIC
SOURCE: Mentor Software, $34.95

FOLDIR I BASIC SKILLS GRADES K- 3 SKILLS PRACT
Direct'nal concepts of left, right, up, down, on, off, top, bottom, etc
PET LANG: BASIC
SOURCE: Project COMCAL, $30

READING BASIC SKILLS GRADES K- 2 SKILLS PRACT
Teaches child to work from left to right by copying 2 numbers (in pkg)
TRS-80 LANG: BASIC
SOURCE: Jensen Software, $9.95*

LET REC2 BASIC SKILLS GRADES K- 1 ROTE DRILL
Lower case letter recognition from list of three choices
PET LANG: BASIC
SOURCE: Project COMCAL, $10

SPELLING I BASIC SKILLS GRADES 1- 6 ROTE DRILL
Six programs that drill students on sixty common primary-reader words
TRS-80 APPLE LANG: BASIC
SOURCE: Mentor Software, $59.95

WORD FLASH BASIC SKILLS GRADES 1- 12 SKILLS PRACT
Pract spell'g, vis mem'ry; flashes words to type; variable difficulty
APPLE LANG: BASIC
SOURCE: Ideatech, $7.95

JUMBLE RACE BASIC SKILLS GRADES 1- 6 EDUC'L GAME
Teacher enters words to be unscrambled in order to win car race
PET LANG: BASIC
SOURCE: Project COMCAL, $30

HANGMAN BASIC SKILLS GRADES 1- 8 EDUC'L GAME
Word guessing game; can substitute any set of words
TRS-80 PET LANG: BASIC
SOURCE: Micro Learningware, $[illegible].95

LETTER REC BASIC SKILLS GRADES K- 2 ROTE DRILL
Exercise to familiarize child with letters of the alphabet (in pkg)
TRS-80 LANG: BASIC
SOURCE: Jensen Software, $9.95*

ALPHABET BASIC SKILLS GRADES K- 2 ROTE DRILL
Student names the next letter in the alphabet; races with computer
PET LANG: BASIC
SOURCE: Micro Ed, $7.95

KEYS BASIC SKILLS GRADES 1- 3 EDUC'L GAME
Designed to increase letter & number recognition for young children
APPLE LANG: BASIC
SOURCE: Cook's Computer Co., $4.95

BASEBL SPEL BASIC SKILLS GRADES 1- 6 EDUC'L GAME
Student moves ahead in baseball by recognizing correctly spelled words
PET LANG: BASIC
SOURCE: Project COMCAL, $30

FOLDIR II BASIC SKILLS GRADES K- 3 SKILLS PRACT
Develops concepts of time, comparisons, top-middle-bottom, addition
PET LANG: BASIC
SOURCE: Project COMCAL, $30

SPELLING II BASIC SKILLS GRADES 1- 6 ROTE DRILL
Six programs that drill students on sixty common primary reader words
TRS-80 APPLE LANG: BASIC
SOURCE: Mentor Software, $59.95

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* Price of package including this program.

ENGLISH - BASIC SKILLS (CONT)

06011

WORD COMPL ||Word is given, repeated w/ missing
BASIC SKILLS ||ltr; chil supplies ltr (in pkg)
GRADES K- 2 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Jensen Software, $9.95*

TIC JUMBLE ||Teacher enters 20 words; two play
BASIC SKILLS ||Tic-tac-toe by unscrambling words
GRADES 1- 6 || PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $30

SPELL-BOUND ||Practice spelling words at diff'nt
BASIC SKILLS ||levels; words can be changed
GRADES 1- 12 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Robert Baker, $50

ALPHA ROCKT ||Student advances rocket to moon by
BASIC SKILLS ||correctly alphabetizing words
GRADES 1- 6 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $30

LETTERS ||Cap letter and number recognition;
BASIC SKILLS ||multiple choice from list of three
GRADES K- 1 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Project COMCAL, $10

LEARN SPELL ||Partial words displayed; child adds
BASIC SKILLS ||ltr to form complete word (in pkg)
GRADES K- 4 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Jensen Software, $9.95*

SOUNDS LIKE ||Pract w/ words which sound alike
BASIC SKILLS ||but are spelled differently(in pkg)
GRADES K- 4 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Jensen Software, $9.95*

SPELL-FIND ||Teacher enters 20 words; student
BASIC SKILLS ||finds the missing letter in word
GRADES 1- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

WORD RECOG ||Given a word, child must pick the
BASIC SKILLS ||same word from set of 3 (in pkg)
GRADES K- 2 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Jensen Software, $9.95*

LOOK N SPEL ||Teacher enters 20 words; student
BASIC SKILLS ||retypes word when it disappears
GRADES 1- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

LETTER-MTCH ||Student matches letter on screen;
BASIC SKILLS ||has a race with computer
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

LEARN WORDS ||Child must match picture to word;
BASIC SKILLS ||intermed difficulty words (in pkg)
GRADES K- 4 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Jensen Software, $9.95*

FLASHSPEL'G ||Student tries to spell word flashed
BASIC SKILLS ||on screen; extra time given if nec
GRADES 1- 6 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $14.95

SPELL RULES ||Teaches applicat'n 6 most common
BASIC SKILLS ||spell'g rules; w/ game exers (disk)
GRADES 3- 10 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $29.95

ENGLISH - BASIC SKILLS (CONT)

06012

SPELL QUIZ ||Decide which one of 4 words is mis-
BASIC SKILLS ||spelled and enter correct spelling
GRADES 3- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $4

ABAGELS ||User guesses letters in short words
BASIC SKILLS ||based on logical clues (in pkg)
GRADES 3- 9 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $10.95*

SPEED-READ ||Program to increase and monitor
BASIC SKILLS ||reading speed & comprehension
GRADES 3- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Instant Software, $7.95

SPELL GR 4 ||4th grade spelling test using some
BASIC SKILLS ||commonly misspelled words (in pkg)
GRADES 3- 8 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Jensen Software, $9.95*

SPELLING-A ||Long and short vowels, and words
BASIC SKILLS ||with "r","y","wh","oo" (7 tapes)
GRADES 2- 2 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $49.95

HANGMAN ||Spelling game; words in data state-
BASIC SKILLS ||ments can be changed (in pkg)
GRADES 3- 9 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Jensen Software, $9.95*

HANGMAN ||Guess a secret word selected by
BASIC SKILLS ||computer or friend (in pkg)
GRADES 3- 9 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Creative Computing, $7.95*

A & AN ||Fill in a/an before noun; Fonz re-
BASIC SKILLS ||wards rt ans; help after 2 wrong
GRADES 3- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Glenn Fisher, $4

SPELL'G BEE ||Word flashed for set interval, user
BASIC SKILLS ||types it; words changed easily
GRADES 3- 10 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Glenn Fisher, $2.50

SPELL TEST ||Choose correctly spelled word out
BASIC SKILLS ||of set of misspelled words (in pkg)
GRADES 3- 8 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Jensen Software, $9.95*

SWAP ||Alphabetize 2-8 words, moving 2 per
BASIC SKILLS || time; program tracks least moves
GRADES 3- 7 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Glenn Fisher, $2.50

ENGLISH ||Practice identifying nouns, adjs,
BASIC SKILLS ||or pronouns; keeps & reports score
GRADES 3- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $4

VOCAB TEST ||Choose correct synonym from a list
BASIC SKILLS ||for a given word (in pkg)
GRADES 3- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Jensen Software, $9.95*

SPELLING ||User shown a word and asked to
BASIC SKILLS ||spell it after it disappears
GRADES 2- 8 || APPLE ||LANG: BASIC
ROTE DRILL || SOURCE: Creative Computing, $7.95

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* Price of package including this program.

ENGLISH - BASIC SKILLS (CONT)

06012

MINICROSSWD ||Four programs that generate dozens
BASIC SKILLS ||of crossword puzzles
GRADES 3- 12 ||TRS-80 APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

SPELLING-B ||Vowels & consonants, 2-syl words,
BASIC SKILLS ||homonyms, compound words (7 tapes)
GRADES 3- 3 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $49.95

WORD MASTER ||Guess 3-let'r word; teaches reason-
BASIC SKILLS ||ing & vocab (in pkg)
GRADES 4- 7 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT ||SOURCE: Program Design Inc, $14.95*

SPELLING-C ||Vowels, word endings, 2-syl words,
BASIC SKILLS ||homonyms & compounds (7 tapes)
GRADES 4- 4 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $49.95

STORY BLDR ||Partial verse is presented; child
BASIC SKILLS ||fills in missing parts (in pkg)
GRADES 3- 7 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT ||SOURCE: Program Design Inc, $14.95*

SCRAMBLE ||Two students compete to unscramble
BASIC SKILLS ||letters to form word
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Educat'l Activit's, $14.95

SPELLING-D ||Vowels, word endings, prefixes,
BASIC SKILLS ||suffixes, 3 & 4 syllables (7 tapes)
GRADES 5- 5 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $49.95

SPELL GR 5 ||5th grade spelling test using some
BASIC SKILLS ||commonly misspelled words (in pkg)
GRADES 4- 8 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Jensen Software, $9.95*

TACHISTISCP ||Pract reproducing phrases flashed
BASIC SKILLS ||on screen; adjustable time (in pkg)
GRADES 4- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Peoples Software, $8*

SCRAMBLE ||User must unscramble a word in a
BASIC SKILLS ||timed or untimed game
GRADES 4- 12 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Cook's Computer Co., $4.95

SPELLING ||Teaches and drills spelling; with
BASIC SKILLS ||final test (8 progs & audio tape)
GRADES 7- 12 ||TRS-80 APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Program Design Inc, $18.95

VOCABULARY2 ||Seq to VOCAB1; harder questions on
BASIC SKILLS ||synonyms and antonyms (11 progs)
GRADES 7- 12 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

SPELLING-E ||Vowels, compounds, prefixes, suf-
BASIC SKILLS ||fixes, 2-syllable words (7 tapes)
GRADES 6- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $49.95

VOCAB GR 7 ||Mult choice quest's on word mean'g;
BASIC SKILLS ||drill w/ clues/quiz; 5 cass @ $20ea
GRADES 7- 7 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

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* Price of package including this program.

ENGLISH - BASIC SKILLS (CONT)

06014

SPELL GR 7 ||User chooses which of 5 words mis-
BASIC SKILLS ||spelled; drill/quiz; 10 cass @$20ea
GRADES 7- 7 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

VOCABULARY1 ||Questions on synonyms and antonyms;
BASIC SKILLS ||last lesson is a test (11 progs)
GRADES 7- 12 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

VOCAB GR 9 ||Mult choice quest's on word mean'g;
BASIC SKILLS ||drill w/ clues/quiz; 5 cass @ $20ea
GRADES 9- 9 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

VOCAB GR 8 ||Mult choice quest's on word mean'g;
BASIC SKILLS ||drill w/ clues/quiz; 5 cass @ $20ea
GRADES 8- 8 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

SPELL GR 9 ||User chooses which of 5 words mis-
BASIC SKILLS ||spelled; drill/quiz; 10 cass @$20ea
GRADES 9- 9 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

SPELL GR 8 ||User chooses which of 5 words mis-
BASIC SKILLS ||spelled; drill/quiz; 10 cass @ $20ea
GRADES 8- 8 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

SPELL GR 11 ||User chooses which of 5 words mis-
BASIC SKILLS ||spelled; drill/quiz; 10 cass @$20ea
GRADES 11- 11|| PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

VOCAB GR 11 ||Mult choice quest's on word mean'g;
BASIC SKILLS ||drill w/ clues/quiz; 5 cass @ $20ea
GRADES 11- 11|| PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

SPELL GR 10 ||User chooses which of 5 words mis-
BASIC SKILLS ||spelled; drill/quiz; 10 cass @$20ea
GRADES 10- 10|| PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

VOCAB GR 10 ||Mult choice quest's on word mean'g;
BASIC SKILLS ||drill w/ clues/quiz; 5 cass @ $20ea
GRADES 10- 10|| PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

SPELL GR 12 ||User chooses which of 5 words mis-
BASIC SKILLS ||spelled, drill/quiz; 10 cass @$20ea
GRADES 12- 12|| PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

VOCAB GR 12 ||Mult choice quest's on word mean'g;
BASIC SKILLS ||drill w/ clues/quiz; 5 cass @ $20ea
GRADES 12- 12|| PET ||LANG: BASIC
ROTE DRILL || SOURCE: Microphys, $20

ENGLISH - LITERATURE

ADVER TECHS ||Exer's in critical analysis;exposes
LITERATURE ||4 methods of persuasion (on disk)
GRADES 5- 12 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $24.95

ENGLISH - LITERATURE (CONT)

06155

QUOTATIONS ||Generates missing-letter puzzles,
LITERATURE ||with clues, using famous quotations
GRADES 9- 12 ||TRS-80 APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

ENGLISH

CONWAR ||Game of War; players determine cor-
ENGLISH ||rect form for contractions
GRADES 1- 4 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $20

HOMONYMS ||Student picks the right word for
ENGLISH ||the blank; prg gives summary at end
GRADES 1- 8 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

CONCEN SYAN ||Game of Concentration with synonyms
ENGLISH ||and antonyms; two players, 3 levels
GRADES 1- 6 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $30

USAGE BONER ||Focus on common mistakes made in
ENGLISH ||English usage (15 tapes)
GRADES 1- 8 || PET ||LANG: BASIC
TUTORIAL || SOURCE: Micro Ed, $99

STORY TELL ||Child reads story & reports facts;
ENGLISH ||each run has new key wds (in pkg)
GRADES K- 4 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Jensen Software, $9.95*

MAKE A SENT ||Unscramble words to make a sen-
ENGLISH || tence; six possible sentences
GRADES 1- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

ANTONYMS ||Drill and practice in choosing
ENGLISH ||antonyms; summary given
GRADES 1- 6 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Micro Ed, $7.95

RHYME WAR ||Game of war; players determine if 2
ENGLISH ||words rhyme; short and long vowels
GRADES 1- 3 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $20

HOMONYMS ||Drill and practice in choosing
ENGLISH ||homonymns; summary given
GRADES 1- 4 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Micro Ed, $7.95

SPEED READ ||User reproduces words flashed on
ENGLISH ||screen at five different speeds
GRADES 1- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

RUN-ON SENT ||User divides group of words into 2
ENGLISH ||sentences; race with computer
GRADES 3- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

SUBJ-VERB ||User chooses correct verb for sub-
ENGLISH ||ject; has race with steam engine
GRADES 2- 8 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

ENGLISH (CONT)

06162

READ-COMP ||Student picks the one word in four
ENGLISH ||that doesn't belong in grp(10 prgs)
GRADES 3- 9 || PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

WORD-DEMONS ||Practice in usage of there/their/-
ENGLISH ||they're and to/too/two (2 tapes)
GRADES 2- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $14.95

CONTRACTION ||Race game for two; players enter
ENGLISH ||contractions for designated words
GRADES 2- 4 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $10

SYLLABLES ||Teacher enters 20 words to be
ENGLISH ||separated into syllables w/ accents
GRADES 3- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

QUEST/STORY ||User answers 7 quest'ns; answers in-
ENGLISH ||corp'd into randomly chosen story
GRADES 2- 8 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Ideatech, $4.95

PREFIXES ||Instr and pract in using prefixes;
ENGLISH ||will help vocab, reading & spelling
GRADES 5- 8 || PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

NOUNS ||Text material & examples given,
ENGLISH ||then quiz on skill (2 cassettes)
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

ADJECTIVES ||Text materials & examples given,
ENGLISH || then quiz on skill (2 cassettes)
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

SYNONYMS ||Prog displays word chosen randomly
ENGLISH ||from list; user enters synonym
GRADES 4- 9 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Glenn Fisher, $2.50

CODE BREAKR ||Three scrambled message games;
ENGLISH ||easy to hard
GRADES 5- 12 || PET APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Program Design Inc, $14.95

MADLIBS ||Asks for, checks parts of speech;
ENGLISH ||builds humorous passages (in pkg)
GRADES 5- 9 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $15.95*

PART OF SP ||User gives part of speech in mult
ENGLISH ||choice quest'ns; help aft 2 errors
GRADES 4- 9 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Glenn Fisher, $4

PRONOUNS ||Text material & examples given,
ENGLISH ||then quiz on skill (2 cassettes)
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

CONTRACTION ||Text material, examples, & quiz on
ENGLISH ||contractions (2 cassettes)
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

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* Price of package including this program.

ENGLISH (CONT)

06163

HAIKU ||You & computer create haiku poetry;
ENGLISH ||comp has phrase library (in pkg)
GRADES 5- 12 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Creative Computing, $7.95*

SENTENCES ||Covers identif'n of subjs, simple
ENGLISH ||subjs, verbs, predic's, sent frags
GRADES 4- 10 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $24.95

ADVERBS ||Text material & examples given,
ENGLISH ||then quiz on skill (2 cassettes)
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

VERBS ||Text material & examples given,
ENGLISH ||then quiz on skill (2 cassettes)
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

ANALOGIES ||Characteristics of analogies and
ENGLISH ||how to analyze them (6 programs)
GRADES 7- 12 ||TRS-80 PET APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Program Design Inc, $14.95

SYN/ANTONYM ||Text material, examples and quiz on
ENGLISH ||synonyms & antonyms (2 cassettes)
GRADES 6- 12 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

HOMONYMS ||Text material, examples, and quiz
ENGLISH ||on homonymns & homographs (2 cass)
GRADES 6- 12 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

FINE ARTS - MUSIC

TREBLE CLEF ||Teaches lines and spaces of treble
MUSIC ||clef; test given; uses CB2 sound
GRADES K- 6 || PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Micro Ed, $7.95

MUSIC-RHYTH ||User matches a rhythm using space
MUSIC ||bar; requires CB2 sound
GRADES 1- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

MUSIC-NOTES ||User decides if 2nd note is higher,
MUSIC ||same, lower than 1st note(w/sound)
GRADES 1- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

MUSIC COMP ||Composer which allows one to com-
MUSIC ||pose & play up to 4 simult voices
GRADES 10- 12|| APPLE ||LANG:
SIMULATION || SOURCE: Micro-Music Inc., $220

FOREIGN LANGUAGE - FRENCH

FRENCH ||Vocabulary builder for beginning
FRENCH ||French student; nouns/verbs -2 prgs
GRADES 5- 12 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Tycom Associates, $15.95

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* Price of package including this program.

FOREIGN LANGUAGE - FRENCH (CONT)

08223

WORD-FRENCH ||Generates scrambled word patterns
FRENCH ||containing hidden French words
GRADES 9- 12 ||TRS-80 APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

ADVENT-FREN ||User explores fantasy land; thril-
FRENCH ||ling adventures; dialog in French
GRADES 9- 12 ||CP/M ||LANG:
EDUC'L GAME || SOURCE: Creative Computing, $24.95

FOREIGN LANGUAGE - SPANISH

WORD-SPANSH ||Generates scrambled word patterns
SPANISH ||containing hidden Spanish words
GRADES 9- 12 ||TRS-80 APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

GUIDANCE - STUD PLACEM'T

ADVISOR AID ||Helps advisor track, register stu-
STUD PLACEM'T||d'ts; reports cse compl,GPA -on dsk
GRADES 10- 12|| APPLE ||LANG: BASIC
TEACHER AID || SOURCE: LNS Software, $19.95

GUIDANCE - TESTING

IQ TEST ||Determine your IQ with a test of 60
TESTING ||multiple choice questions
GRADES 4- 12 ||TRS-80 ||LANG: BASIC
TEACHER AID || SOURCE: Creative Computing, $14.95

HEALTH

DIET ||Enter phys'l & diet info; computer
||analyzes nutritional content-in pkg
GRADES 5- 12 ||TRS-80 ||LANG: BASIC
DATA RETR'VAL||SOURCE: Creative Computing, $24.95*

RATS ||Control rats by sanitation, slow &
||quick kill poisons (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

MALARIA ||Control malaria epidemic w/ medi-
||cation,drugs,pesticides,etc(in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

DIET ||Retrieves nutrient data to explore
||adequacy of users diet (in pkg)
GRADES 6- 12 ||TRS-80 ||LANG: BASIC
DATA RETR'VAL|| SOURCE: Project LOCAL, $17.95*

MALAR ||Investig bio/soc/polit/ecol aspects
||of malaria epidemic ctrl (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

HEALTH (CONT)

10005

RATS ||Investigates control of rat popula-
||tion in city or apt (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

HOME ECONOMICS

DIET ||Enter phys'l & diet info; computer
||analyzes nutritional content-in pkg
GRADES 5- 12 ||TRS-80 ||LANG: BASIC
||SOURCE: Creative Computing, $24.95*

HOME ECONOMICS - FOODS

DIET PLAN'G ||Enter wgt, hgt; determ diet plan;
FOODS ||calorie & carbo info given (in pkg)
GRADES 4- 12 ||TRS-80 ||LANG: BASIC
DATA RETR'VAL|| SOURCE: Peoples Software, $8*

DIET ||Input phy'l & diet info; computer
FOODS ||analyzes nutritional content-in pkg
GRADES 5- 12 ||TRS-80 ||LANG: BASIC
DATA RETR'VAL||SOURCE: Creative Computing, $24.95*

DIET ||Retrieves nutrient data to explore
FOODS ||adequacy of users diet (in pkg)
GRADES 6- 12 ||TRS-80 ||LANG: BASIC
DATA RETR'VAL|| SOURCE: Project LOCAL, $17.95*

MATHEMATICS

GRADE MAINT ||Grade maintenance program; includes
|| ranked and weighted avgs (on disk)
GRADES 1- 12 || APPLE ||LANG: BASIC
TEACHER AID || SOURCE: Byte Shop, $30

MATHEMATICS - BASIC SKILLS

SHAPE REC ||Child chooses same shape as the
BASIC SKILLS ||given one from choice of three
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

MATH DRILL ||Practice in add'n, subtr, multipl;
BASIC SKILLS ||with graphics; user controls level
GRADES 1- 8 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Learningware, $5.95

MATH TUTORI ||Drills on math concepts in a game
BASIC SKILLS ||format; 3-prog pkg; 4 ops & frac's
GRADES 1- 6 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Instant Software, $7.95

HOW MANY? ||Prints blocks on screen; child
BASIC SKILLS ||counts blocks & enters no. (in pkg)
GRADES K- 3 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Jensen Software, $9.95*

MATHEMATICS - BASIC SKILLS (CONT)

13011

NUMBERS ||Student must identify numeral from
BASIC SKILLS ||list of three to match given one
GRADES K- 1 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Project COMCAL, $10

MATH SEQ'S ||Pract, test'g, pert rec'ds, 4 basic
BASIC SKILLS ||ops& laws, neg nos., fract's, dec's
GRADES 1- 6 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Milliken Publish'g, $200

COSHAPE ||Counting shapes of one kind that
BASIC SKILLS ||appear on screen
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $10

NUMBER ||Student fills in missing digit be-
BASIC SKILLS ||tween one and nine; summary given
GRADES K- 1 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Micro Ed, $7.95

CASH-R ||Provides practice in using coins to
BASIC SKILLS || buy merchandise (in pkg)
GRADES 1- 6 ||TRS-80 ||LANG: BASIC
SKILLS PRACT ||SOURCE: Software Industries, $9.90*

FANCY FROGS ||Sequencing game which helps develop
BASIC SKILLS ||logic, foresight, & problem-solving
GRADES 1- 12 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Cook's Computer Co., $4.95

MATH K-8 ||Diag,pract,mast test'g;4 arith ops,
BASIC SKILLS ||numeration,frac's,dec's (47 prgs)
GRADES K- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Dallas Pub Schls, $995

MATPIE ||Pick the missing part that will
BASIC SKILLS ||complete the partial rectangle
GRADES K- 3 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $10

CHANGE MAKE ||Provides practice in making change
BASIC SKILLS ||using U.S. coinage
GRADES 1- 6 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Learningware, $5.95

NUMERAL REC ||Exercise to familiarize child with
BASIC SKILLS ||numerals 1 through 9 (in pkg)
GRADES K- 2 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Jensen Software, $9.95*

SUPER DRILL ||Drill & practice exercise on 4
BASIC SKILLS ||basic operations (in pkg)
GRADES 1- 6 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Minn Ed Comp Consrt, $30*

LOOK COUNT2 ||Student counts how many objects are
BASIC SKILLS ||on the screen; no more than ten
GRADES K- 1 || PET ||LANG: BASIC
ROTE DRILL || SOURCE: Project COMCAL, $10

LOOK COUNT1 ||Student counts how many objects are
BASIC SKILLS ||on the screen; no more than five
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $10

VISDIC ||4 geomet shapes are shown; object
BASIC SKILLS ||is to choose the 1 that's different
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

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* Price of package including this program.

MATHEMATICS - BASIC SKILLS (CONT)

BAGELS 13012
BASIC SKILLS ||Logic game in which user tries to
GRADES 3- 9 ||guess a 3-digit number given clues
EDUC'L GAME || TRS-80 PET ||LANG: BASIC
|| SOURCE: Micro Learningware, $5.95

NUMBER GUES ||Student(s) & computer take turns
BASIC SKILLS ||guessing numbers in range 1 to 100
GRADES 3- 6 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $4

METRIC RDRN ||Learning game which gives practice
BASIC SKILLS ||with the metric system
GRADES 3- 9 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

CLOCKS ||Time guessing game; gives practice
BASIC SKILLS ||in developing prob-solv'g strateg's
GRADES 3- 9 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Cook's Computer Co., $4.95

INTRO DEC ||Computation practice using deci-
BASIC SKILLS ||mals, esp for slow learners
GRADES 2- 5 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Educat'l Activit's, $29.95

BATNUM ||Battle of numbers strategy game;
BASIC SKILLS ||like Nim; uses graphics (in pkg)
GRADES 3- 9 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Creative Computing, $7.95*

STONES ||Logic game in which user tries to
BASIC SKILLS || pick up last stone (like Nim)
GRADES 3- 12 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

TAXMAN ||Game which encourages the learning
BASIC SKILLS ||of factoring princ's (in pkg)
GRADES 3- 6 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Minn Ed Comp Consrt, $30*

PLACE VALUE ||Introduction to basics of decimal
BASIC SKILLS ||number system & place value
GRADES 3- 7 ||TRS-80 PET ||LANG: BASIC
TUTORIAL || SOURCE: Micro Learningware, $5.95

CHANGE ||Subtract'n to make change; to $100;
BASIC SKILLS ||program makes change in coins if rt
GRADES 3- 9 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Glenn Fisher, $2.50

ADDITION ||Practice with columnar addition; 4
BASIC SKILLS ||difficulty levels (in pkg)
GRADES 3- 8 ||TRS-80 PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $10.95*

REGROUPING ||Ten programs which provide practice
BASIC SKILLS ||using regrouping skills
GRADES 3- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Mentor Software, $79.95

FRACTIONS ||Fractions shown graph'ly w/ numer
BASIC SKILLS ||equivs; pract w/ frac sizes(in pkg)
GRADES 2- 6 ||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Jensen Software, $9.95*

BAGELS ||User guesses numerals in 3-digit
BASIC SKILLS ||numbers from logical clues (in pkg)
GRADES 3- 8 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $9.95*

MATHEMATICS - BASIC SKILLS (CONT)

ESTIMATE ||Practice in estimating lengths of 13012
BASIC SKILLS ||line segments in cms (in pkg)
GRADES 3- 6 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Minn Ed Comp Consrt, $30*

DECIMALS ||Dec values explained w/ place value
BASIC SKILLS ||emph; conv'g fracs to decs (in pkg)
GRADES 2- 6 ||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Jensen Software, $9.95*

BAGELS ||Number logic game; develops prob-
BASIC SKILLS ||lem solving techniques (in pkg)
GRADES 3- 6 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Minn Ed Comp Consrt, $30*

INSOLATION ||Game of logic and math skill
BASIC SKILLS ||
GRADES 2- 6 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $30

HURKLE ||User guesses location of Hurkle on
BASIC SKILLS ||grid given compass clues (in pkg)
GRADES 3- 8 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Creative Computing, $7.95*

METRIC BKJK ||Game of Blackjack giving practice
BASIC SKILLS ||with the metric system
GRADES 3- 9 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

MULT FACTS ||Drills student on basic multiplica-
BASIC SKILLS ||tion facts; reprts perform (on dsk)
GRADES 4- 9 || APPLE ||LANG: BASIC
ROTE DRILL || SOURCE: LNS Software, $?.95

DECIMALS ||Introduces decimal numbers, then
BASIC SKILLS ||drills on concepts introduced
GRADES 4- 9 ||TRS-80 PET ||LANG: BASIC
TUTORIAL || SOURCE: Micro Learningware, $5.95

FRACTIONS ||Auto placement, pract, testing in
BASIC SKILLS ||fractions; avail in pkg or separate
GRADES 4- 8 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: UNICOM, $40

SETS&NUMBER ||Introduction to number theory with
BASIC SKILLS ||graphic illustrations
GRADES 4- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Learningware, $5.95

FRACTIONS ||Converting fractions to decimals &
BASIC SKILLS ||back; nums & denoms 1 to 15 -in pkg
GRADES 5- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Bottom Shelf, $51.50*

FRACTIONS ||Introduces concept of fractions
BASIC SKILLS ||with numerous graphic illustrations
GRADES 4- 8 ||TRS-80 PET ||LANG: BASIC
TUTORIAL || SOURCE: Micro Learningware, $5.95

CHEMIST ||Use ratios to find ans, avoid being
BASIC SKILLS ||blown up; if lose, prog gives help
GRADES 5- 9 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Glenn Fisher, $2.50

DECIMAL SUB ||Dec. subtraction in tenths from .1
BASIC SKILLS ||to 1.2 with number line displayed
GRADES 4- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Robert Baker, $50

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* Price of package including this program.

MATHEMATICS - BASIC SKILLS (CONT)

13013

PLACE VALUE ||Practice naming digit place values,
BASIC SKILLS ||round'g; reports perform (on disk)
GRADES 4- 10 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: LNS Software, $4.95

REDUC FRACS ||Practice in reducing fractions;
BASIC SKILLS ||reports performance (on disk)
GRADES 4- 10 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: LNS Software, $4.95

FRAC-DEC-% ||Pract convert'g betw frac's, deci-
BASIC SKILLS ||mals, %s; w/ help; perf rept (disk)
GRADES 4- 10 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: LNS Software, $4.95

DECIMAL ADD ||Decimal addition in tenths from .1
BASIC SKILLS ||to 1.2 with number line displayed
GRADES 4- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Robert Baker, $50

DECIMLS +&- ||Columnar dec'l add'n, subtr'n,whole
BASIC SKILLS ||nums to .01's; ans entry rt to left
GRADES 4- 9 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Glenn Fisher, $4

DECIMAL-% ||Convers betw decimals & %'s; gives
BASIC SKILLS ||graphix tutor'l after 2 wrong ans's
GRADES 5- 9 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Glenn Fisher, $4

DECIMATION ||Add,sub,mult,div of decimal nos. on
BASIC SKILLS ||4 different levels; w/ time limit
GRADES 4- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Robert Baker, $50

FRAC-MIX NO ||Common frac & mixed no. problems
BASIC SKILLS ||solved step by step
GRADES 4- 8 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Educ'l Microsystems, $14

FRACT'N +&- ||Add'n, subtr'n of fract'ns; tutor'l
BASIC SKILLS ||after 2 wrong ans; chks ans reduc'n
GRADES 4- 9 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Glenn Fisher, $4

DECIMALS ||Diag placement, pract, testing in
BASIC SKILLS ||decimals; avail in pkg or separate
GRADES 5- 8 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: UNICOM, $60

FRAC ADD ||20 problems in fraction addition;
BASIC SKILLS ||elapsed time printed for each prob
GRADES 5- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Robert Baker, $50

FACTOR ||Game which encourages the learning
BASIC SKILLS ||of factoring princ's (like Taxman)
GRADES 5- 9 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

FIND FACTRS ||Given sum, product of 2 nos., find
BASIC SKILLS ||the numbers; 2 levels: 1-10, 1-100
GRADES 4- 9 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Glenn Fisher, $4

MIXNUM ||Changing improper fractions to
BASIC SKILLS ||mixed numbers and vice versa
GRADES 5- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

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* Price of package including this program.

MATHEMATICS - BASIC SKILLS (CONT)

13013

FRAC TO DEC ||20 probs converting fractions to
BASIC SKILLS ||decimals; two tries given
GRADES 5- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Robert Baker, $50

COINS ||Practice in calculating value of
BASIC SKILLS ||random coin combinations (in pkg)
GRADES 4- 7 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $10.95*

HURKLE ||Player seeks 'Hurkle' using x-y
BASIC SKILLS ||coord's, 1 quadrant only (in pkg)
GRADES 4- 9 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $9.95*

BAGELS ||Number guessing game; develops
BASIC SKILLS ||problem-solving techniques
GRADES 4- 9 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Cook's Computer Co., $4.95

20 QUESTION ||Number guessing game; gives prac-
BASIC SKILLS ||tice in use of < and > symbols
GRADES 4- 9 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Cook's Computer Co., $4.95

MATH PAK II ||4 basic operations with fractions;
BASIC SKILLS ||immed error check and pos feedback
GRADES 4- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Edu-Ware, $14.95

PERCT PROBS ||Pract w/ basic types % probs; help,
BASIC SKILLS ||diffic lvl opts; perf rept -on disk
GRADES 4- 10 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: LNS Software, $4.95

METRIC PRE ||Tests your knowledge of prefixes in
BASIC SKILLS ||the metric system
GRADES 5- 12 ||TRS-80 ||LANG: BASIC
ROTE DRILL || SOURCE: Project LOCAL, $4

DIVIS FACTS ||Drill on divis'n facts; choice of
BASIC SKILLS ||exer's; reports performance -on dsk
GRADES 4- 9 || APPLE ||LANG: BASIC
ROTE DRILL || SOURCE: LNS Software, $2.95

HURKLE ||User seeks Hurkle on vert, horiz,
BASIC SKILLS ||1- or 4-quadr graph (disk pkg)
GRADES 5- 9 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Minn Ed Comp Consrt, $20*

PRIME FACTR ||Finds prime factors of positive
BASIC SKILLS ||integer
GRADES 7- 10 || APPLE ||LANG: BASIC
CONCEPT DEMO || SOURCE: LNS Software, $1.95

NIM ||Play against computer; specify no.,
BASIC SKILLS ||size of piles & win option (in pkg)
GRADES 6- 12 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Creative Computing, $7.95*

PERCENTS ||Diag placement, pract, testing in
BASIC SKILLS ||percents; avail in pkg or separate
GRADES 6- 9 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: UNICOM, $20

BASENUM ||Practice converting from one base
BASIC SKILLS ||to another; bases 2 to 32 (in pkg)
GRADES 6- 12 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Bottom Shelf, $51.50*

MATHEMATICS - BASIC SKILLS (CONT)

13014

POINTS ||Practice finding x-y coordinates of
BASIC SKILLS || points in all 4 quadrants (in pkg)
GRADES 7- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $8.95*

FRAC ||Practice on fraction/decimal con-
BASIC SKILLS ||version; word problems (in pkg)
GRADES 6- 9 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $8.95*

MUGWUMP ||Player tries to locate 4 imaginary
BASIC SKILLS ||creatures using x-y coords (in pkg)
GRADES 6- 10 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $10.95*

MATHEMATICS - ALGEBRA

GRAPH BLDR || 11 progs & games on coordinate
ALGEBRA || graphing systems; easy to hard
GRADES 5- 10 ||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Program Design Inc, $14.95

SQ BINOMIAL ||Gives practice in squaring binom-
ALGEBRA ||ials; score given at end
GRADES 7- 12 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Cook's Computer Co., $4.95

NUM-SERIES ||Practice in analyzing number series
ALGEBRA ||probs; incr difficulty (8 progs)
GRADES 7- 12 ||TRS-80 PET APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $14.95

PLOT ||This program will plot linear
ALGEBRA ||equations an x-y graph
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
CONCEPT DEMO || SOURCE: Micro Learningware, $5.95

GEOM PROG 2 ||Geomet progres'ns; common ratio,nth
ALGEBRA ||term, sum of progr; scord prob sets
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

VERBL-RATES ||Pract solving word probs involving
ALGEBRA ||rates; problem sets with scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

SIM EQN 2X2 ||Pract finding solutions to 2 simul-
ALGEBRA ||taneous equations; scored prob sets
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

ALGEBRA ||Pract in elem alg, signed integers,
ALGEBRA ||sets, binomials, factor'g (7 progs)
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Tycom Associates, $19.95

SLOPE ||Practice on slope and intercept
ALGEBRA ||concepts using linear equations
GRADES 9- 12 || APPLE ||LANG: BASIC
SKILLS PRACT || SOURCE: Cook's Computer Co., $4.95

VERBL-INTER ||Pract solving word probs involving
ALGEBRA ||simple interest; prob sets, scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

MATHEMATICS - ALGEBRA (CONT)

13455

VERBL-MIXTS ||Pract solving word probs involving
ALGEBRA ||mixtures; problem sets w/ scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

SIM EQN 3X3 ||Pract finding solutions to 3 simul-
ALGEBRA ||taneous equat'ns; scored prob sets
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

FORMULA EVL ||Pract solv'g implicit relat'nshp
ALGEBRA ||for unknown var; prob sets, scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

ELEM-ALG ||Reviews fundamentals of elem alg;
ALGEBRA ||interactive; easy to hard problems
GRADES 8- 10 ||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Nat'l Softw'e Mktg, $7.95

VERBAL-WORK ||Pract solving word probs involving
ALGEBRA ||work rates; prob sets w/ scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

VARIATIONS ||Pract w/ direct, indirect & joint
ALGEBRA ||relat'nshps; problem sets w/ scor'g
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

VERBAL-AGES ||Pract solving word probs w/ age
ALGEBRA ||relationships; prob sets w/ scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

CART GRAPHS ||Plots a standard x,y graph for a
ALGEBRA ||given function to scale (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
COMP SUPPORT || SOURCE: Creative Computing, $7.95*

GEOM PROG 1 ||Geomet progres'ns; common ratio,nth
ALGEBRA ||term, geomet mean; scored prob sets
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

VERBAL-NUMS ||Pract solving word probs w/ numeri-
ALGEBRA ||cal relatnshps; prob sets w/ scor'g
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

LIN EQUATNS ||Pract solv'g simple linear equat'ns
ALGEBRA ||for 1 unknown; prob sets w/ scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

VERBL-DIGTS ||Pract solv'g word probs w/ rel'shps
ALGEBRA ||among digits of num;scored prb sets
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

ARITH PROG2 ||Arith progres'ns; common diffrnc,
ALGEBRA ||nth term, sum of prog; scord probs
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

VERBL-COINS ||Pract solving word probs w/ coin
ALGEBRA ||values; problem sets w/ scoring
GRADES 8- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

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* Price of package including this program.

MATHEMATICS - ALGEBRA (CONT)

13455

JCGRAPH ALGEBRA GRADES 8- 12 CONCEPT DEMO ||Graphs function entered into pro-gram by user (in pkg) ||TRS-80 PET ||LANG: BASIC SOURCE: Project LOCAL, $8.95*

VERBAL-GEOM ALGEBRA GRADES 8- 11 SKILLS PRACT ||Pract solving word probs involving simple geometry; prob sets, scoring || PET ||LANG: BASIC SOURCE: Microphys, $20

ALG QUIZ ALGEBRA GRADES 8- 12 SKILLS PRACT ||Equations in form ax+by+cz=d must be solved for one of the variables ||TRS-80 ||LANG: BASIC SOURCE: Project LOCAL, $4

ARITH PROG1 ALGEBRA GRADES 9- 11 SKILLS PRACT ||Arith progres'ns; common diffrnc, nth term, # terms; scored prob sets || PET ||LANG: BASIC SOURCE: Microphys, $20

POLAR GRAPH ALGEBRA GRADES 10- 12 COMP SUPPORT ||Plots polar graphs to scale; user enters range & increment (in pkg) ||TRS-80 ||LANG: BASIC SOURCE: Creative Computing, $7.95*

TRIGNMTRY I ALGEBRA GRADES 10- 12 SKILLS PRACT ||Drills basic trig definit's; pract w/ sin/cos probs; scored prob sets || PET ||LANG: BASIC SOURCE: Microphys, $20

QUADR EQNS ALGEBRA GRADES 10- 12 SKILLS PRACT ||Gives practice in solving quadratic equations; scored prob sets || PET ||LANG: BASIC SOURCE: Microphys, $20

PARAM GRAPH ALGEBRA GRADES 10- 12 COMP SUPPORT ||Graphs parametric functions w/ x & y expressed in terms of T (in pkg) ||TRS-80 ||LANG: BASIC SOURCE: Creative Computing, $7.95*

MATHEMATICS - ANALYSIS

LIMACN-AREA ANALYSIS GRADES 10- 12 TUTORIAL ||Describes, graphs & finds areas of limacons (on disk) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

TAYLR APPRX ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Graphs funct'ns, Taylor series to show series approx of func's (disk) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

REGRESSION ANALYSIS GRADES 10- 12 COMP SUPPORT ||Linear & parabolic regression used for data analysis, graphing -in pkg ||TRS-80 ||LANG: BASIC SOURCE: Creative Computing, $7.95*

POLY GRPH32 ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Graphs 2 polynom funct'ns; user gives coeff's, axis (disk + 32K) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

MULT FUNC32 ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Graphs 2 circ, abs val, greatst in-tgr funct's; user coef's, axis(dsk) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

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* Price of package including this program.

MATHEMATICS - ANALYSIS (CONT)

13466

FUNC GRPH48 ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Graphs mult funct'ns of many types w/ user coeff's, axis (disk + 48K) || APPLE ||LANG: BASIC SOURCE: Math Software, $25

ARITH FUNCT ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Graphs user-entered & 256 pre-programmed functions, esp trig (disk) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

SIN/COS FNC ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Graphs mult sin/cos funct'ns; shows ampl, per'd, phase shift (on disk) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

LIMITS SEQS ANALYSIS GRADES 10- 12 CONCEPT DEMO ||Shows graph'ly limits of user-supplied & preprog'd sequences (disk) || APPLE ||LANG: BASIC SOURCE: Math Software, $15

MATHEMATICS - ARITHMETIC

ADDITION ARITHMETIC GRADES K- 2 ROTE DRILL ||Uses numbers 1-10 with graphics to illustrate problems; summary given || PET ||LANG: BASIC SOURCE: Micro Ed, $7.95

SUBTRACTION ARITHMETIC GRADES K- 2 ROTE DRILL ||Uses numbers 1-10 with graphics to illustrate problems; summary given || PET ||LANG: BASIC SOURCE: Micro Ed, $7.95

ADDITION ARITHMETIC GRADES 1- 5 SKILLS PRACT ||Diag placement, pract, mast test'g in addition; lge nums;in pkg or sep ||TRS-80 PET APPLE ||LANG: BASIC SOURCE: UNICOM, $20

WARMATH ARITHMETIC GRADES 1- 6 EDUC'L GAME ||Game for two; War with teacher-selected problems for individuals || PET ||LANG: BASIC SOURCE: Project COMCAL, $30

SPEED FACTS ARITHMETIC GRADES 1- 8 EDUC'L GAME ||Reinforces 4 ops facts; 3 presentation speeds; 1 table or mixed tabls || APPLE ||LANG: BASIC SOURCE: Ideatech, $9.95

MATH-BID ARITHMETIC GRADES 1- 7 SKILLS PRACT ||Pract w/ 4 basic ops; user bids based on est of ability to do probs || PET ||LANG: BASIC SOURCE: Micro Ed, $7.95

NUM STRINGS ARITHMETIC GRADES 1- 8 SKILLS PRACT ||Provides practice in adding strings of numbers, varying length ||TRS-80 PET ||LANG: BASIC SOURCE: Micro Learningware, $5.95

SUBTRACTION ARITHMETIC GRADES 1- 8 SKILLS PRACT ||10 levels of difficulty in subtraction of whole numbers (in pkg) ||TRS-80 ||LANG: BASIC SOURCE: Bottom Shelf, $51.50*

ADD ON ARITHMETIC GRADES K- 3 SKILLS PRACT ||Add'n probs w/ solution aided by blocks display for count'g (in pkg) ||TRS-80 ||LANG: BASIC SOURCE: Jensen Software, $9.95*

MATHEMATICS - ARITHMETIC (CONT)

13471

INTRO MATH ARITHMETIC GRADES 1- 4 SKILLS PRACT
||Computation practice, esp for slow learners; add, sub, mult, div probs
||TRS-80 ||LANG: BASIC
|| SOURCE: Educat'l Activit's, $29.95

ADD-SUBTRAC ARITHMETIC GRADES 1- 6 ROTE DRILL
||Gives problems using 2- and 3- place numbers in columns
|| PET ||LANG: BASIC
|| SOURCE: Micro Ed, $7.95

ADDITION ARITHMETIC GRADES 1- 8 SKILLS PRACT
||10 levels of difficulty in addition of whole numbers (in pkg)
||TRS-80 ||LANG: BASIC
|| SOURCE: Bottom Shelf, $51.50*

MATH PAK I ARITHMETIC GRADES 1- 6 SKILLS PRACT
||Dr[illegible] on 4 basic ops w/ immed check of [illegible]ts and positive reinforcem't
||TRS-80 ||LANG: BASIC
|| SOURCE: Edu-Ware, $14.95

SKILL GAMES ARITHMETIC GRADES 1- 9 SKILLS PRACT
||Twelve programs for drill and practice in four arithmetic operations
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: Mentor Software, $94.95

MATHELP ARITHMETIC GRADES 1- 6 SKILLS PRACT
||Gives practice on the 4 basic arithmetic operations (in pkg)
||TRS-80 N STAR ||LANG: BASIC
||SOURCE: Software Industries, $9.90*

MULT-FACTS ARITHMETIC GRADES 1- 6 SKILLS PRACT
||Practice multiplication w/ specific or random problems; w/ summary
|| PET ||LANG: BASIC
|| SOURCE: Micro Ed, $7.95

STORY(+-) ARITHMETIC GRADES 1- 6 EDUC'L GAME
||Mixture of story problems in subtraction and addition
|| PET ||LANG: BASIC
|| SOURCE: Micro Ed, $7.95

COUNT'EM ARITHMETIC GRADES K- 1 ROTE DRILL
||Student must count objects on the screen
|| PET ||LANG: BASIC
|| SOURCE: Micro Ed, $7.95

TAKE AWAY ARITHMETIC GRADES K- 3 SKILLS PRACT
||Subtr probs w/ solution aided by blocks display for count'g (in pkg)
||TRS-80 ||LANG: BASIC
|| SOURCE: Jensen Software, $[illegible].95*

FTBALL MATH ARITHMETIC GRADES 1- 6 EDUC'L GAME
||Two players advance in football by answering math problems; 9 levels
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $30

MATH RACE ARITHMETIC GRADES 1- 6 EDUC'L GAME
||Car race; 2 players answer probs, 4 basic ops, nos. to 100; 9 levels
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $30

SPEED DRILL ARITHMETIC GRADES 1- 8 SKILLS PRACT
||Drill on four basic operations with time element added
||TRS-80 ||LANG: BASIC
|| SOURCE: Micro Learningware, $5.95

CONMAT ARITHMETIC GRADES K- 6 SKILLS PRACT
||Matching equiv pairs of additions, subtractions; 11 lvls, div & mult
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $30

MATHEMATICS - ARITHMETIC (CONT)

13471

TICMAT ARITHMETIC GRADES K- 6 EDUC'L GAME
||Tic-tac-toe regular and with math problems; 12 difficulty levels
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $30

ADD-FACTS ARITHMETIC GRADES 1- 6 ROTE DRILL
||Practice addition with specific or random problems; summary given
|| PET ||LANG: BASIC
|| SOURCE: Micro Ed, $7.95

K-8 MATH ARITHMETIC GRADES K- 8 SKILLS PRACT
||Diag, pract, mast test'g in 4 arith operations (10 progs, 5 cassettes)
||TRS-80 ||LANG: BASIC
|| SOURCE: Radio Shack, $199

BASEBL MATH ARITHMETIC GRADES 1- 6 EDUC'L GAME
||Two play baseball by answering math problems; add, sub, mul, div to 20
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $10

WORD PROBS ARITHMETIC GRADES 1- 6 SKILLS PRACT
||Six programs which present arithmetic word probs for student sol'n
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: Mentor Software, $54.95

MATH RACE ARITHMETIC GRADES K- 3 EDUC'L GAME
||1-2 player game w/ simple add probs & animal or vehicle race (in pkg)
||TRS-80 ||LANG: BASIC
|| SOURCE: Jensen Software, $9.95*

MATH RACE 2 ARITHMETIC GRADES K- 3 EDUC'L GAME
||1-2 player game w/ intermed +, - probs; animal/vehicle race (in pkg)
||TRS-80 ||LANG: BASIC
|| SOURCE: Jensen Software, $9.95*

MATH DRILL ARITHMETIC GRADES 2- 9 SKILLS PRACT
||Practice add, sub, mult, div probs; time limit option (in pkg)
|| APPLE ||LANG: BASIC
|| SOURCE: Creative Computing, $7.95*

NUMBO-JUMBO ARITHMETIC GRADES 2- 9 SKILLS PRACT
||Add, sub, mult & div of integers on 4 levels; probs have time limits
||TRS-80 ||LANG: BASIC
|| SOURCE: Robert Baker, $30

DIVISIONAL ARITHMETIC GRADES 3- 8 SKILLS PRACT
||Provides division problems at level of difficulty specified by user
||TRS-80 ||LANG: BASIC
|| SOURCE: Micro Learningware, $5.95

TIMES ARITHMETIC GRADES 3- 6 ROTE DRILL
||Multipl'n facts to 9; gives rt ans after 2 wrong; shows time to rt ans
|| PET ||LANG: BASIC
|| SOURCE: Glenn Fisher, $4

ARITH LAWS ARITHMETIC GRADES 3- 5 SKILLS PRACT
||Diag placement, pract, test'g in arith laws; lge nums; in pkg or sep
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: UNICOM, $20

MULTIPLY ARITHMETIC GRADES 3- 5 SKILLS PRACT
||Diag placement, pract, mast test'g in mult'n; lge nums; in pkg or sep
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: UNICOM, $20

MULT & DIV ARITHMETIC GRADES 3- 8 ROTE DRILL
||Drills on mult and div tables up to 12; 5 difficulty levels (in pkg)
||TRS-80 ||LANG: BASIC
|| SOURCE: Bottom Shelf, $51.50*

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* Price of package including this program.

MATHEMATICS - ARITHMETIC (CONT)

13472

MATHGRID ARITHMETIC GRADES 3- 8 EDUC'L GAME
||Reinforces multiplic facts, 0-9 by associating grid pts to x,y coords
|| APPLE ||LANG: BASIC
|| SOURCE: Ideatech, $9.95

MULTDIV FUN ARITHMETIC GRADES 3- 8 EDUC'L GAME
||Pract w/ 1 table or mixed; scoreb'd display; reviews troublesome prob's
|| APPLE ||LANG: BASIC
|| SOURCE: Ideatech, $7.95

DIVIS DRILL ARITHMETIC GRADES 3- 6 ROTE DRILL
||Divis facts to 90/9; gives rt ans after 2 wrong; shows time to rt ans
|| PET ||LANG: BASIC
|| SOURCE: Glenn Fisher, $4

MULT DRILL ARITHMETIC GRADES 2- 8 SKILLS PRACT
||Whole no. mult by teaching objs; timing, digit-by-digit corr options
||TRS-80 ||LANG: BASIC
|| SOURCE: Educ'l Microsystems, $17

DIVISION ARITHMETIC GRADES 3- 6 SKILLS PRACT
||Diag placement, pract, mast test'g in division; lge nums;in pkg or sep
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: UNICOM, $20

DIVIDE ARITHMETIC GRADES 2- 6 ROTE DRILL
||Problems in short division; reinforces multiplic tables (in pkg)
||TRS-80 ||LANG: BASIC
|| SOURCE: Jensen Software, $9.95*

DRILL ARITHMETIC GRADES 2- 8 SKILLS PRACT
||Pract add'n ,subtr, mult, or divis; choice of integers or decimals
||TRS-80 ||LANG: BASIC
|| SOURCE: Project LOCAL, $4

ADD W/CARRY ARITHMETIC GRADES 2- 6 SKILLS PRACT
||Vertical add probs; fill in column sum and carry amount (in pkg)
|| APPLE ||LANG: BASIC
|| SOURCE: Creative Computing, $7.95*

MULTIPLY ARITHMETIC GRADES 2- 5 ROTE DRILL
||Learning aid, mult tables; adjusts difficulty based on % score -in pkg
||TRS-80 ||LANG: BASIC
|| SOURCE: Jensen Software, $9.95*

COUNTING *S ARITHMETIC GRADES 3- 6 SKILLS PRACT
||Student must identify product of rows and columns of stars on screen
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $10

ADDITION ARITHMETIC GRADES 2- 6 SKILLS PRACT
||Whole no. addition by teaching obj; timing, digit-by-digit corr options
||TRS-80 ||LANG: BASIC
|| SOURCE: Educ'l Microsystems, $17

SUBTRACTION ARITHMETIC GRADES 2- 5 SKILLS PRACT
||Diag placement, pract, mast test'g in subtract, lge nums;in pkg or sep
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: UNICOM, $20

MATH PRACT ARITHMETIC GRADES 2- 8 SKILLS PRACT
||Add, sub, mult, & div practice; two levels of difficulty
||TRS-80 ||LANG: BASIC
|| SOURCE: DEMI-Software, $6.95

RUNNING ARITHMETIC GRADES 3- 6 EDUC'L GAME
||Game to win a race by doing math problems with an opponent
|| PET ||LANG: BASIC
|| SOURCE: Project COMCAL, $10

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* Price of package including this program.

MATHEMATICS - ARITHMETIC (CONT)

13472

SUBTRACTION ARITHMETIC GRADES 2- 8 SKILLS PRACT
||Whole no. subtr by teaching objs; timing, digit-by-digit corr options
||TRS-80 ||LANG: BASIC
|| SOURCE: Educ'l Microsystems, $17

ARITH VOCAB ARITHMETIC GRADES 4- 9 ROTE DRILL
||Drill on basic arith vocab; also reviews defin's; perf rept -on disk
|| APPLE ||LANG: BASIC
|| SOURCE: LNS Software, $2.95

LEGACY ARITHMETIC GRADES 4- 6 EDUC'L GAME
||A timed drill on multiplication facts in game format
|| APPLE ||LANG: BASIC
|| SOURCE: Cook's Computer Co., $4.95

FRAC SUBTR ARITHMETIC GRADES 5- 9 SKILLS PRACT
||20 problems in fraction subtract'n; elapsed time printed for each prob
||TRS-80 ||LANG: BASIC
|| SOURCE: Robert Baker, $50

TAKE IT ARITHMETIC GRADES 4- 9 EDUC'L GAME
||Drill/game on four basic operat'ns; timed input; varbl diffic'ty lvls
|| APPLE ||LANG: BASIC
|| SOURCE: Cook's Computer Co., $4.95

QUOTIENT QZ ARITHMETIC GRADES 4- 9 EDUC'L GAME
||Identify a number given the remainders when divided by 3,5,7; 5 tries
|| PET ||LANG: BASIC
|| SOURCE: Glenn Fisher, $4

CHIEF ARITHMETIC GRADES 4- 7 EDUC'L GAME
||A humorous practice in mixed operations
|| PET ||LANG: BASIC
|| SOURCE: Glenn Fisher, $2.50

NEG NUMBERS ARITHMETIC GRADES 6- 8 SKILLS PRACT
||Diag placement, pract, test'g in negative numbers; avail pkg or sep
||TRS-80 PET APPLE ||LANG: BASIC
|| SOURCE: UNICOM, $20

TENTRATION ARITHMETIC GRADES 6- 12 SKILLS PRACT
||Multiplication and division of powers of 10, with time limits
||TRS-80 ||LANG: BASIC
|| SOURCE: Robert Baker, $50

MATHEMATICS - CALCULUS

MIDPT TRAP CALCULUS GRADES 11- 12 CONCEPT DEMO
||Graphic interpret, numeric evalua'n of Midpoint, Trapezoid rules (disk)
|| APPLE ||LANG: BASIC
|| SOURCE: Math Software, $15

GRAPH INTEG CALCULUS GRADES 11- 12 TUTORIAL
||Shows theory of integ'n w/ graphic displays of rect sums, limit (disk)
|| APPLE ||LANG: BASIC
|| SOURCE: Math Software, $15

CVAREA CALCULUS GRADES 10- 12 CONCEPT DEMO
||Evaluates defin integ of F(x) for X=A to B; 4 differ approxs -in pkg
||TRS-80 ||LANG: BASIC
|| SOURCE: Project LOCAL, $8.95*

13494

MATHEMATICS - CONSUMER MATH

BANK ||Shows princ'l installm't buying,
CONSUMER MATH||long-term loans, sav'g acct -in pkg
GRADES 7- 11 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $14.95*

SAVINGS ||Finds bal'c of sav acct for yearly
CONSUMER MATH||investm't or mthly deposit -in pkg
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $14.95*

HOUSE ACCT ||2 programs: budg/expense analysis,
CONSUMER MATH||life insurarce cost comparison
GRADES 9- 12 ||TRS-80 ||LANG: BASIC
CONCEPT DEMO || SOURCE: Instant Software, $7.95

LOAN ||For instal loan, finds mthly int'r
CONSUMER MATH||payment & balance due (in pkg)
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $14.95*

MATHEMATICS - GENERAL MATH

TARGET MATH ||Problems in 4 basic operations;
GENERAL MATH ||answers given in cartoon form
GRADES 1- 6 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

BATTLESHIP ||Game in which student and computer
GENERAL MATH ||try to locate points on a grid
GRADES 4- 8 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

STOCK SIMUL ||Players buy and sell stocks with
GENERAL MATH ||object being to increase net worth
GRADES 6- 12 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

STOCK MARKT ||Student buys & sells shares of five
GENERAL MATH ||imaginary issues (in pkg)
GRADES 6- 10 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Project LOCAL, $14.95*

MATHEMATICS - GEOMETRY

MATH TUTOR2 ||Pract w/ volumes & areas of geomet
GEOMETRY ||figures; also percents; game format
GRADES 7- 12 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Instant Software, $7.95

GEOM AREAS ||Pract finding areas of various
GEOMETRY ||plane figures; prob sets w/ scoring
GRADES 9- 11 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

ELEM-GEOM ||Reviews fundamentals of elem geom;
GEOMETRY ||interactive; easy to hard problems
GRADES 9- 11 ||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Nat'l Softw'e Mktg, $7.95

13515

MATHEMATICS - STATISTICS

WHATS SCOR? ||Introd's stat'l measures, distribu-
STATISTICS ||tions, histograms, curves (on disk)
GRADES 6- 12 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $29.95

MATHEMATICS - TRIGONOMETRY

ELEM-TRIG ||Reviews fundamentals of elem trig;
TRIGONOMETRY ||interactive; easy to hard problems
GRADES 10- 12||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Nat'l Softw'e Mktg, $7.95

TRIGNMTRY 2 ||Pract on rt triangle properties, 6
TRIGONOMETRY ||basic trig functions; scor'd probs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

MISCELLANEOUS

CONCEN TIME ||Vers of Concentrat'n in which times
||are matched; 2 players, 5 levels
GRADES 1- 6 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Project COMCAL, $30

SKETCH ||Allows user to draw a picture using
||direction (up,left, etc) commands
GRADES 1- 9 ||TRS-80 ||LANG: BASIC
CONCEPT DEMO || SOURCE: Project LOCAL, $4

MORSE CODE ||Practice Sending & receiving Morse
||code; user supplies 6volt dc buzzer
GRADES 3- 12 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Program Design Inc, $16.50

TEACHING ||Demonstration of uses and values of
||educational software
GRADES 8- 12 ||TRS-80 PET APPLE ||LANG: BASIC
TEACHER AID || SOURCE: Program Design Inc, $6

MISCELLANEOUS - BASIC SKILLS

POS N SPACE ||Child moves objects on screen; dev-
BASIC SKILLS ||elops skill w/ spatial relationships
GRADES K- 2 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

CLOCK ||Practice in telling time on the
BASIC SKILLS ||hour and the half hour
GRADES K- 3 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Micro Ed, $7.95

PRESCHOOL ||Teaches vital cognitive skills that
BASIC SKILLS ||children need in school; with guide
GRADES K- 1 ||TRS-80 PET APPLE ||LANG: BASIC
CONCEPT DEMO || SOURCE: Program Design Inc, $14.95

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* Price of package including this program.

MISCELLANEOUS - BASIC SKILLS (CONT)

14011

ROBOT ||Identify missing parts of the body
BASIC SKILLS ||from pictured robots
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $20

ANIMALS ||Prog guesses animals using class-
BASIC SKILLS ||ification info entered by user
GRADES 1- 6 ||TRS-80 PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

SAMDIF ||2 non-geom figures are shown; task
BASIC SKILLS ||is to determine same or differenc
GRADES K- 1 || PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Project COMCAL, $10

CONCENTRATE ||Game in which user matches names of
BASIC SKILLS ||animals on a hidden grid
GRADES 3- 6 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: Micro Learningware, $5.95

HEXLETTER ||Strategy game; capture more letters
BASIC SKILLS ||than computer or friend (in pkg)
GRADES 3- 9 || PET ||LANG: BASIC
EDUC'L GAME || SOURCE: Creative Computing, $7.95*

MEMORY MYTH ||Develops memory skills; variables
BASIC SKILLS ||include image size, ordering, time
GRADES 5- 12 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $14.95

MISCELLANEOUS - GEOGRAPHY

MAP READING ||Presents concepts direction, dis-
GEOGRAPHY ||tance; step-by-step scale exer's
GRADES 4- 10 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $14.95

SCIENCE - BASIC SKILLS

SCIENT METH ||Covers observ'n, generaliza'n, mea-
BASIC SKILLS ||surem't, verific'n; simul's expermt
GRADES 5- 10 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $14.95

SCIENCE - STATISTICS

WHATS SCOR? ||Introd's stat'l measures, distribu-
STATISTICS ||tions, histograms, curves (on disk)
GRADES 6- 12 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $29.95

SCIENCE - ASTRONOMY

PLANET WGT ||Computes object's wgt on any of 7
ASTRONOMY ||other planets and our moon
GRADES 6- 9 ||TRS-80 ||LANG: BASIC
CONCEPT DEMO || SOURCE: Computrex, $n/av

SCIENCE - ASTRONOMY (CONT)

16564

ORBIT ||Computes data on orbits around
ASTRONOMY ||either earth or sun (4 programs)
GRADES 6- 10 ||TRS-80 ||LANG: BASIC
CONCEPT DEMO || SOURCE: Computrex, $10

SCIENCE - BIOLOGY

CIRCULATION ||Covers functions, princ circulatory
BIOLOGY ||syst organs; animatd grafix; on dsk
GRADES 4- 8 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $29.95

POP ||Examines 3 methods of popul projec-
BIOLOGY ||tion; successive refinem't (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

MALARIA ||Control malaria epidem w/ medi-
BIOLOGY ||cation,drugs,pesticides,etc(in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

TAG ||User investigates size of wildlife
BIOLOGY ||pop via tagging/recovery (in pkg)
GRADES 9- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

GENE ||Simulates trait inheritance accord-
BIOLOGY || ing to Mendelian model (in pkg)
GRADES 9- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

COMPETE ||User may study interactions between
BIOLOGY ||real and hypothet flowering plants
GRADES 9- 12 ||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

CELL SIMUL ||User must keep cell alive by ad-
BIOLOGY ||justing substance intake & output
GRADES 8- 12 ||TRS-80 PET ||LANG: BASIC
SIMULATION || SOURCE: Micro Learningware, $5.95

HARDY ||Leads stud't thru formulat'n Hardy-
BIOLOGY ||Weinberg princ popul genet -in pkg
GRADES 9- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

PHOSYN ||Investigates effects of varying CO2
BIOLOGY ||conc & light intens on photosynth's
GRADES 8- 11 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $4

POP ||Enables exploration of 3 mathemat-
BIOLOGY ||ical models of pop growth (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

EVOLUT ||Explores factors involved in evolu-
BIOLOGY ||tion by inherited variations
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

LOCKEY ||Biochem investig'n of lock and key
BIOLOGY ||model of enzyme specificity -in pkg
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

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* Price of package including this program.

SCIENCE - BIOLOGY (CONT)

16576

NZYMC ||Investigation of effects of pH,
BIOLOGY ||temp, enzyme conc on reaction rates
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $4

LINKOVER ||User may do genetic mapping exper's
BIOLOGY ||with emphasis on linkage, x-over
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

SCIENCE - CHEMISTRY

GAS LAW ANL ||Solves many types of gas law prob's
CHEMISTRY ||in iso-therm, -bar, -vol, gen procs
GRADES 10- 12|| PET ||LANG: BASIC
COMP SUPPORT || SOURCE: Microphys, $20

BOHR ATOM ||User explores electrostat attract'n
CHEMISTRY ||forces in simple atoms (in pkg)
GRADES 10- 12|| PET ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30*

THERMODYN 2 ||Quest's on gas w/ isobaric compr'n,
CHEMISTRY ||ht removed; dialog, scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

EMF OF CELL ||Pract finding EMF of electrochemi-
CHEMISTRY ||cal cells; dialog or scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

STOICH:GENL ||Pract solv'g mixed mass/mass,mass/-
CHEMISTRY ||vol, vol/vol probs; dialog, quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

PH CONCEPT ||Quest's on pH, pOH; pract w/ log
CHEMISTRY ||scales; dialog or scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

GAS LAWS ||Reviews Boyle's, Charles',
CHEMISTRY ||Gay-Lussac's Laws; dialog, quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

GEN GAS LAW ||Quest's on behav of gas where all 3
CHEMISTRY ||thermo varbls change; dialog, qz's
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

TITRATION ||Simulates typical acid-base titra-
CHEMISTRY ||tions (on disk)
GRADES 10- 12|| APPLE ||LANG: BASIC
SIMULATION || SOURCE: Mentor Software, $19.95

PCP ||Develops skill in find'g % composi-
CHEMISTRY ||tion of chem compounds (in pkg)
GRADES 10- 12||TRS-80 ||LANG: BASIC
TUTORIAL || SOURCE: Project LOCAL, $15.95*

GM-MOL MASS ||Generates inorg comp'ds for determ
CHEMISTRY ||of molec'r masses; dialog,scord qzs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

SCIENCE - CHEMISTRY (CONT)

16586

RKINET ||User may study effects of various
CHEMISTRY ||factors on reaction kinetics
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

ST:VOL/VOL ||Pract solv'g probs on volume/volume
CHEMISTRY ||relat'nshps; dialog, scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

MOLALITY ||Quest's on gm-molec-mass, molality;
CHEMISTRY ||dialog or scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

HABER ||User studies effects various fac-
CHEMISTRY ||tors on prod'n NH4 by Haber process
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

ST:MASS/MAS ||Pract in solv'g probs on mass/mass
CHEMISTRY ||relat'nshps; dialog, scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

ST:MASS/VOL ||Pract solv'g probs on mass/volume
CHEMISTRY ||relat'nshps; dialog, scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

NORMALITY ||Quest's on gm-molec/gm-eqv mass,
CHEMISTRY ||normality; dialog, scored qzs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

KINETICS ||User studies effects of temp, pH on
CHEMISTRY ||rate of a 1st-order react'n -in pkg
GRADES 10- 12|| PET ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30*

MOLE CONCPT ||Quest's on mole concept, chem form-
CHEMISTRY ||ula writing; dialog, scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

% CONCENT ||Pract calcul'g % or fract concen-
CHEMISTRY ||tration of solns; dialog or qz's
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

THERMODYN I ||Reviews molar ht capac, Charles'
CHEMISTRY ||Law, 1st Law of Therm; dialog, qz's
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

REDOX ||User studies methods of determining
CHEMISTRY ||reducing power of reagents (in pkg)
GRADES 10- 12|| PET ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30*

MOLARITY ||Quest's on molarity; review of mole
CHEMISTRY ||concept; dialog, scored quizzes
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

TITRATION ||User explores problems in typical
CHEMISTRY ||strong acid-base titration (in pkg)
GRADES 10- 12|| PET ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30*

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* Price of package including this program.

16595

SCIENCE - EARTH SCIENCE

CLIMATE ||User identifies climates & climatic
EARTH SCIENCE||patterns from attributes (in pkg)
GRADES 8- 10 ||TRS-80 ||LANG: BASIC
SKILLS PRACT || SOURCE: Project LOCAL, $15.95*

SCIENCE - ECOL/ENV SCI

STERL ||Investigates effectiveness of two
ECOL/ENV SCI ||methods of pest control (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

SURVIVAL ||User selects animal from woods and
ECOL/ENV SCI ||attempts to keep it alive in wild
GRADES 6- 12 ||TRS-80 PET ||LANG: BASIC
SIMULATION || SOURCE: Micro Learningware, $5.95

LIMITS ||Version of limits to growth world
ECOL/ENV SCI ||model with five subsystems(in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

BUFFALO ||Simulates effects of herd manage-
ECOL/ENV SCI ||ment on buffalo population (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

RATS ||Control rats by sanitation, slow &
ECOL/ENV SCI ||quick kill poisons (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

POLUT ||Student explores effects of various
ECOL/ENV SCI ||factors on water quality -in pkg
GRADES 6- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

TAG ||Simulates tagging & recovery method
ECOL/ENV SCI ||used to estim animal popul- in pkg
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

ODELL1 ||Simulates a food chain in game set-
ECOL/ENV SCI ||ting; student is fish (disk pkg)
GRADES 7- 12 || APPLE ||LANG: BASIC
EDUC'L GAME || SOURCE: Minn Ed Comp Consrt, $20*

POLLUTE ||Student explores effects of various
ECOL/ENV SCI || factors on water qual (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

BUFLO ||Studies effects alternate harvest'g
ECOL/ENV SCI || policies on buffalo pop (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

MALAR ||Investig bio/soc/polit/ecol aspects
ECOL/ENV SCI ||of malaria epidemic ctrl (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

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* Price of package including this program.

SCIENCE - ECOL/ENV SCI (CONT)

16605

COMPETE ||User may study interactions between
ECOL/ENV SCI ||real and hypothet flowering plants
GRADES 9- 12 ||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

STERL2 ||Compares cost, penticide & sterile
ECOL/ENV SCI ||male release for fly ctrl (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

STERL1 ||Compares sterile male release &
ECOL/ENV SCI ||pesticides for fly ctrl (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

LIMITS ||Study of world as dynam system and
ECOL/ENV SCI ||long-term effects of growth -in pkg
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

ECOL MODEL ||Explores factors affecting popul'n
ECOL/ENV SCI ||growth, simple to complex situat'ns
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

SCIENCE - PHYSICS

INTERSTELLR ||User may explore space-time effects
PHYSICS ||expected in space travel
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Computrex, $10

PROJECTILE ||Simulates projectile motion based
PHYSICS ||on elev angle & velocity entered
GRADES 9- 12 ||TRS-80 PET ||LANG: BASIC
SIMULATION || SOURCE: Micro Learningware, $5.95

SLITS ||Simul's Young's double-slit exper,
PHYSICS ||wave theory of light propag -in pkg
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $14.95*

VECTORS I ||Pract in find'g size, direct'n of
PHYSICS ||result't of 3-5 vectors; dialog,qzs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

INTERP ||User explores science' use of mod-
PHYSICS ||els w/ emph on wave theory of light
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

SCATTER ||User does exper's w/ particle scat-
PHYSICS ||tering due to different materials
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

SCATR1 ||Calcul's angul distrib of scattered
PHYSICS ||alpha parts for lab exper (in pkg)
GRADES 10- 12||TRS-80 ||LANG: BASIC
COMP SUPPORT || SOURCE: Project LOCAL, $14.95*

INELA COLIS ||Practice inelastic collision analy-
PHYSICS ||sis; dialog, quiz gener w/ scoring
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

SCIENCE - PHYSICS (CONT)

16656

SPEC HT CAP ||Quest'n on definit of specific heat
PHYSICS ||capacity; dialog, qz gener w/scor'g
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

SCATR2 ||Plots alpha scatr distrib, Thomson,
PHYSICS ||Rutherford, hard sph mods (in pkg)
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $14.95*

SCATR3 ||Plots trajectories of alpha parti-
PHYSICS ||cles, Rutherford model (in pkg)
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $14.95*

PHOTEL EFCT ||Quest'n on analy'g photoelect emis-
PHYSICS ||s'n from metal cathodes; dialog,qzs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

NEWTON ||User studies predict'n of satellite
PHYSICS ||orbits w/ Newton's laws
GRADES 10- 12||TRS-80 PET APPLE ||LANG: BASIC
SIMULATION || SOURCE: CONDUIT, $30

HTS FUS/VAP ||Quest'n on heats of fusion & vapor-
PHYSICS ||ization concepts; dialog, qz gener
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

MILLIKAN ||Simulated lab; students perform
PHYSICS ||Millikan oil drop exper (on disk)
GRADES 11- 12|| APPLE ||LANG: BASIC
SIMULATION || SOURCE: Mentor Software, $19.95

CALORIMETRY ||Pract on calorim princs, esp specif
PHYSICS ||ht capac, enrgy consrv; dialog, qzs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

CENTRIP FOR ||Pract analyzing motion particle in
PHYSICS ||unif circul motion; dialog, qz genr
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

ELECT FIELD ||Covers work to xfer charged part'cl
PHYSICS ||betw pts in unif field; dialog,qz's
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

OPTICS ANLS ||Solves variety of probs re images
PHYSICS ||w/ thin lenses, convx/concv mirrors
GRADES 10- 12|| PET ||LANG: BASIC
COMP SUPPORT || SOURCE: Microphys, $20

VECTORS II ||Finds magnitude, direction of re-
PHYSICS ||sultant of concurrent vector system
GRADES 10- 12|| PET ||LANG: BASIC
COMP SUPPORT || SOURCE: Microphys, $20

INCL PLANE ||Practice motion analy's of particle
PHYSICS ||on inclined plane; dialog, qz gener
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

LIN KINEMAT ||Pract linear motion, graph analysis
PHYSICS ||concepts; dialog or qz gen w/scor'g
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

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* Price of package including this program.

SCIENCE - PHYSICS (CONT)

16656

PROJ MOTION ||Pract projectile flight analysis
PHYSICS ||concepts; dialog or qz gen w/scor'g
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

PROJL ANLS ||Solves gen'l projectile motion prob
PHYSICS ||for flight time, horiz range, etc
GRADES 10- 12|| PET ||LANG: BASIC
COMP SUPPORT || SOURCE: Microphys, $20

LONGL WAVES ||Covers longitud'l waves estab'd in
PHYSICS ||open/cl sed organ pipes; dialog,qzs
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

PULEY-MACHS ||Pract analzg pulley sys's w/ single
PHYSICS ||to triple movbl blocks; dialog, qz's
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

CHARGE ||Simul's Millikan oil drop exper to
PHYSICS ||determine electron charge (in pkg)
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $14.95*

XVERS WAVES ||Quest's on standing waves establ'd
PHYSICS ||in wire w/ ends fastnd; dialog,qz's
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

MOMENT ENRG ||Pract lin'r momentum, impulse, kin-
PHYSICS ||etic energy concepts; dialog/qz gen
GRADES 10- 12|| PET ||LANG: BASIC
SKILLS PRACT || SOURCE: Microphys, $20

SCIENCE - TECHNOL'GY ED

SCIENCE ||Demos computer uses in science;
TECHNOL'GY ED||written for 6th gr sci fair -in pkg
GRADES 6- 10 ||TRS-80 ||LANG: BASIC
LNG TERM PROJ|| SOURCE: Project LOCAL, $9.95*

SOCIAL SCIENCE - STATISTICS

WHATS SCOR? ||Introd's stat'l measures, distribu-
STATISTICS ||tions, histograms, curves (on disk)
GRADES 6- 12 || APPLE ||LANG: BASIC
TUTORIAL || SOURCE: Micro Pwr & Light, $29.95

SOCIAL SCIENCE - CIVICS/GOV'T

POLICY ||Teams take interest grp roles, ex-
CIVICS/GOV T ||plore effects society, econ -in pkg
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

17685

SOCIAL SCIENCE - CURRENT EVENT

ENERGY CRISIS — CURRENT EVENT — GRADES 9- 12 — SIMULATION
!!User may test strategies to solve U.S. energy crisis (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Project LOCAL, $17.95*

FUTURE — CURRENT EVENT — GRADES 9- 12 — SIMULATION
!!User studies effects of govt decisions on energy & pollution in pkg
!!TRS-80 !!LANG: BASIC
!! SOURCE: Project LOCAL, $17.95*

LIMITS — CURRENT EVENT — GRADES 10- 12 — SIMULATION
!!Study of world as dynam system and long-term effects of growth -in pkg
!!TRS-80 !!LANG: BASIC
!! SOURCE: Project LOCAL, $17.95*

EARTH — CURRENT EVENT — GRADES 10- 12 — DATA RETR'VAL
!!Access data on 83 nations to test hypoth's re world energy s -in pkg
!!TRS-80 !!LANG: BASIC
!! SOURCE: Project LOCAL, $17.95*

SOCIAL SCIENCE - ECONOMICS

KINGDOM — ECONOMICS — GRADES 6- 12 — EDUC'L GAME
!!User is ruler of ancient kingdom and must manage people & resources
!!TRS-80 PET !!LANG: BASIC
!! SOURCE: Micro Learningware, $5.95

HMRABI — ECONOMICS — GRADES 6- 10 — EDUC'L GAME
!!User manages economy of ancient Sumeria to support max popul -in pkg
!!TRS-80 PET !!LANG: BASIC
!! SOURCE: Project LOCAL, $17.95*

ECONOMY — ECONOMICS — GRADES 8- 12 — SIMULATION
!!User plays role of U.S. President and makes decisions affecting econ
!!TRS-80 !!LANG: BASIC
!! SOURCE: Micro Learningware, $5.95

BALPAY — ECONOMICS — GRADES 10- 12 — SIMULATION
!!User explores factors affect'g U.S. bal of payments situation (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Project LOCAL, $17.95*

SOCIAL SCIENCE - GEOGRAPHY

DIRECTIONS — GEOGRAPHY — GRADES K- 3 — TUTORIAL
!!Teaches 8 directions of N,S,E,W,NE, SE,NW,SW and estimating of distance
!! PET !!LANG: BASIC
!! SOURCE: Micro Ed, $7.95

U.S. MAP — GEOGRAPHY — GRADES 3- 9 — ROTE DRILL
!!State and/or capital identification from map of United States (in pkg)
!! APPLE !!LANG: BASIC
!! SOURCE: Creative Computing, $7.95*

FOR'GN CAPS — GEOGRAPHY — GRADES 3- 8 — ROTE DRILL
!!Try to identify capital cities of major countries of world (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

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* Price of package including this program.

SOCIAL SCIENCE - GEOGRAPHY (CONT)

17702

STATE CAPS — GEOGRAPHY — GRADES 3- 8 — ROTE DRILL
!!List states, then given capitals one at a time for identif (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

US REGIONS — GEOGRAPHY — GRADES 4- 7 — ROTE DRILL
!!Drill where user identifies U.S. regions in which states are located
!!TRS-80 PET !!LANG: BASIC
!! SOURCE: Micro Learningware, $5.95

COUNTRY — GEOGRAPHY — GRADES 4- 7 — ROTE DRILL
!!Drill on countries and the continents in which they are located
!!TRS-80 !!LANG: BASIC
!! SOURCE: Micro Learningware, $5.95

POP CITIES — GEOGRAPHY — GRADES 4- 9 — ROTE DRILL
!!List the world urban areas according to their population (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

STATES/CAPS — GEOGRAPHY — GRADES 4- 7 — ROTE DRILL
!!Program drills user on randomly selected states and their capitals
!!TRS-80 PET !!LANG: BASIC
!! SOURCE: Micro Learningware, $5.95

WORLD AREA — GEOGRAPHY — GRADES 4- 9 — ROTE DRILL
!!Compare countries with respect to their land areas (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

EDUQUIZ — GEOGRAPHY — GRADES 4- 12 — ROTE DRILL
!!Drill or mult choice: capitals,populations, presidents, etc -in pkg
!!TRS-80 !!LANG: BASIC
!! SOURCE: Bottom Shelf, $51.50*

CAPITOLS — GEOGRAPHY — GRADES 4- 8 — SKILLS PRACT
!!Drill on the states and their capitols (in pkg)
!!TRS-80 !!LANG: BASIC
!!SOURCE: Software Industries, $9.90*

WORLD POP — GEOGRAPHY — GRADES 4- 9 — ROTE DRILL
!!Test your knowledge of most populated countries of the world (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

WORD-GEOG — GEOGRAPHY — GRADES 6- 9 — SKILLS PRACT
!!Generates scrambled word patterns containing geographical place names
!!TRS-80 APPLE !!LANG: BASIC
!! SOURCE: Program Design Inc, $14.95

SOCIAL SCIENCE - HISTORY

STATE ENTRY — HISTORY — GRADES 4- 9 — ROTE DRILL
!!List the states in order of entry into the Union (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

PRESIDENTS — HISTORY — GRADES 4- 7 — ROTE DRILL
!!Program drills student on Presidents of the United States
!!TRS-80 PET !!LANG: BASIC
!! SOURCE: Micro Learningware, $5.95

PRESIDENTS — HISTORY — GRADES 4- 9 — ROTE DRILL
!!List the U.S. Presidents in order of their terms of office (in pkg)
!!TRS-80 !!LANG: BASIC
!! SOURCE: Jensen Software, $9.95*

SOCIAL SCIENCE - HISTORY (CONT)

17714

LIMITS ||Version of limits to growth world
HISTORY ||model with five subsystems(in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

BUFLO ||Explores effects of alternate har-
HISTORY ||vesting policies on buffalo popul'n
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $4

BUFFALO ||Simulates effects of herd manage-
HISTORY ||ment on buffalo population (in pkg)
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

BUFLO ||Explores effects of alternate har-
HISTORY ||vesting policies on buffalo popul'n
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $4

SOCIAL SCIENCE - POLITIC SCI

PORK BARREL ||As a congressman you make political
POLITIC SCI ||decisions and try to get reelected
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
EDUC'L GAME || SOURCE: The Software Exch, $9.95

ELECT1,2 ||Explores campaign strateg's in 14
POLITIC SCI ||American presid'l elect'ns -in pkg
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

SOCIAL SCIENCE - POLITIC SCI (CONT)

17725

POLSYS ||Uses role-play to study process of
POLITIC SCI ||trying to influ'c City Hall -in pkg
GRADES 9- 12 ||TRS-80 PET ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

ELECT3 ||Simul's electorate behav'r; teams
POLITIC SCI ||role-play campaign, elect'n -in pkg
GRADES 8- 12 ||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

SOCIAL SCIENCE - SOCIOLOGY

SAP ||Does statis'l analy's of survey re-
SOCIOLOGY ||sults; for student proj's (in pkg)
GRADES 7- 12 ||TRS-80 PET ||LANG: BASIC
TEACHER AID || SOURCE: Project LOCAL, $15.95*

USPOP ||Study aspects of pop change:growth,
SOCIOLOGY ||age, and sex distribution (in pkg)
GRADES 7- 12 ||TRS-80 ||LANG: BASIC
SIMULATION ||SOURCE: Creative Computing, $24.95*

MASPAR ||Studies relat'n betw soc status/org
SOCIOLOGY ||involvem't & polit'l partic(in pkg)
GRADES 10- 12||TRS-80 PET ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $17.95*

USPOP ||Student investigates U.S. popula-
SOCIOLOGY ||tion trends, their possible effects
GRADES 10- 12||TRS-80 ||LANG: BASIC
SIMULATION || SOURCE: Project LOCAL, $4

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* Price of package including this program.

SUMMARY LISTINGS BY HARDWARE SYSTEM

Separate listings are provided for Apple II, Commodore PET, and Radio Shack Model I. These listings are intended for use by readers interested in software for only one system. The excerpt below is from a hypothetical page in this section. Note that entries are sequenced by school department and subject. Although it is not obvious here, they also are sequenced by lowest applicable grade level.

Each piece of software is described here by a one-line entry. An entry contains name, grade level range, functional description, and identification number. The ID number (17605 in the first line shown) may be used to locate a given software item in the Software Description section. Above the top item in each column of the Software Description section is the identification number of the first program or package in that column (see example on page 3). Entries in the Software Description section are sequenced in ascending order of their ID numbers. In this edition, these values run from about 01000 at the beginning of the section to almost 18000 at the end.

In order to locate the complete description of a piece of software found in the Summary Listing:

1. Ascertain the ID number in the Summary Listing entry.

2. Turn back to the Software Description section and find a column headed by an ID number smaller than the one sought.

3. Turn ahead through the Software Description section to the first ID number larger than the one sought. The entry for the software in question will appear in the preceding column.

This sounds complicated in the telling, but it becomes quite simple as soon as it is tried.

APPLE II SOFTWARE

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * SOCIAL SCIENCE - CURRENT EVENT * * *	
ENERGY	9 - 12	User may test strategies to solve U.S. energy crisis (in pkg)	17605
FUTURE	9 - 12	User studies effects of govt decisions on energy & pollution -in pkg	17685

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * BUSINESS - BUSINESS MATH * * *	
RULE OF 78	9 - 12	Calculates inter due by Rule of 78 on premature loan payment (on disk)	01045
		* * * BUSINESS - TYPING * * *	
TYPING	4 - 12	Provides typing practice; includes time response monitoring	01103
TYPING	4 - 12	Series of programs providing drill, instruction in touch typing -on dsk	01103
PROTYPE	6 - 12	Teaches typists to produce 55wpm in 1/3 time of traditional instruction	01104
		* * * COMPREHENSIVE * * *	
APPLE PILOT	1 - 12	CAI author language; write teaching materials, any level (on disk)	03001
GRADEBOOK	1 - 12	Maintains student records on disk; reports on class or student(s)	03001
CAI + VTR	1 - 12	CAI and videotaped teaching combine to teach and drill on any topic	03001
TUTOR BLDR	3 - 12	Facilitates development of tutorial (CAI) programs (on disk)	03002
VIDEO EDITR	2 - 12	Helps prepare CAI w/ audio & video from video tape (on disk)	03002
TEXT PROC	7 - 12	Text edit, reformat w/ min manual effort; excel for reports -on disk	03004
		* * * COMPREHENSIVE - BASIC SKILLS * * *	
MEM-BUILDER	1 - 6	A series of educ games to improve memory,attn span, and concentration	03011
APPLE DIALG	7 - 12	Orients novice user to keyboard interaction with Apple comp (on disk)	03014
		* * * COMPUTER SCIENCE/LITERACY - BASIC SKILLS * * *	
INTRO MICRO	3 - 9	Six programs which help students acquire computer literacy skills	04012
		* * * COMPUTER SCIENCE/LITERACY - COMPUTER PROG * * *	
BASIC TCPAC	7 - 12	Programs which teach both Integer and Applesoft BASIC (on disk)	04124
BASIC TCHR	7 - 12	13 lessons which teach Integer BASIC; includes tests, index, probs	04124
TEACHINGPAC	7 - 12	Teaches Integer, Applesoft BASIC; w/ float'g point dictionary -on dsk	04124
TEACHERPLUS	7 - 12	Program for teaching Applesoft II BASIC; conversational approach	04124
STEP BYSTEP	8 - 12	32 progs with workbook; teaches a beginner BASIC language (on disk)	04125
		* * * ENGLISH - BASIC SKILLS * * *	
U-SPELL	1 - 12	Allows teacher to create audio enhanced spelling drill	06011
SPELLING I	1 - 6	Six programs that drill students on sixty common primary-reader words	06011
WORD FLASH	1 - 12	Pract spell'g, vis mem'ry; flashes words to type; variable difficulty	06011
KEYS	1 - 3	Designed to increase letter & number recognition for young children	06011
SPELLING II	1 - 6	Six programs that drill students on sixty common primary reader words	06011
SPELL RULES	3 - 10	Teaches applicat'n 6 most common spell'g rules; w/ game exers (disk)	06012
SPELLING	2 - 8	User shown a word and asked to spell it after it disappears	06012
MINICROSSWD	3 - 12	Four programs that generate dozens of crossword puzzles	06012
WORD MASTER	4 - 7	Guess 3-let'r word; teaches reasoning & vocab (in pkg)	06013
STORY BLDR	4 - 7	Partial verse is presented; child fills in missing parts (in pkg)	06013
SCRAMBLE	4 - 12	User must unscramble a word in a timed or untimed game	06013
SPELLING	7 - 12	Teaches and drills spelling; with final test (8 progs & audio tape)	06014
VOCABULARY2	7 - 12	Seq to VOCAB1; harder questions on synonyms and antonyms (11 progs)	06014
VOCABULARY1	7 - 12	Questions on synonyms and antonyms; last lesson is a test (11 progs)	06014

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * ENGLISH - LITERATURE * * *	
ADVER TECHS	5 - 12	Exer's in critical analysis;exposes 4 methods of persuasion (on disk)	06153
QUOTATIONS	9 - 12	Generates missing-letter puzzles, with clues, using famous quotations	06155
		* * * ENGLISH * * *	
READ-COMP	3 - 9	Student picks the one word in four that doesn't belong in grp(10 prgs)	06162
QUEST/STORY	2 - 8	User answers 7 quest's; answers incorp'd into randomly chosen story	06162
PREFIXES	5 - 8	Instr and pract in using prefixes; will help vocab, reading & spelling	06163
CODE BREAKR	5 - 12	Three scrambled message games; easy to hard	06163
SENTENCES	4 - 10	Covers identif'n of subjs, simple subjs, verbs, predic's, sent frags	06163
ANALOGIES	7 - 12	Characteristics of analogies and how to analyze them (6 programs)	06164
		* * * FINE ARTS - MUSIC * * *	
MUSIC COMP	10 - 12	Composer which allows one to compose & play up to 4 simult voices	07206
		* * * FOREIGN LANGUAGE - FRENCH * * *	
WORD-FRENCH	9 - 12	Generates scrambled word patterns containing hidden French words	08225
		* * * FOREIGN LANGUAGE - SPANISH * * *	
WORD-SPANSH	9 - 12	Generates scrambled word patterns containing hidden Spanish words	08275
		* * * GUIDANCE - STUD PLACEM'T * * *	
ADVISOR AID	10 - 12	Helps advisor track, register stud'ts; reports cse compl,GPA -on dsk	09316
		* * * MATHEMATICS * * *	
GRADE MAINT	1 - 12	Grade maintenance program; includes ranked and weighted avgs (on disk)	13001
		* * * MATHEMATICS - BASIC SKILLS * * *	
MATH TUTORI	1 - 6	Drills on math concepts in a game format; 3-prog pkg; 4 ops & frac's	13011
MATH SEQ'S	1 - 6	Pract, test'g, perf rec'ds, 4 arith ops & laws, neg nos., fract's, dec's	13011
FANCY FROGS	1 - 12	Sequencing game which helps develop logic, foresight, & problem-solving	13011
SUPER DRILL	1 - 6	Drill & practice exercise on 4 basic operations (in pkg)	13011
CLOCKS	3 - 9	Time guessing game; gives practice in developing prob-solv'g strateg's	13012
TAXMAN	3 - 6	Game which encourages the learning of factoring princ's (in pkg)	13012
ESTIMATE	3 - 6	Practice in estimating lengths of line segments in cms (in pkg)	13012
BAGELS	3 - 6	Number logic game; develops problem solving techniques (in pkg)	13012
MULT FACTS	4 - 9	Drills student on basic multiplication facts; reprts perform (on dsk)	13013
FRACTIONS	4 - 8	Auto placement, pract, testing in fractions; avail in pkg or separate	13013
PLACE VALUE	4 - 10	Practice naming digit place values, round'g; reports perform (on disk)	13013
REDUC FRACS	4 - 10	Practice in reducing fractions; reports performance (on disk)	13013
FRAC-DEC-%	4 - 10	Pract convert'g betw frac's, decimals, %s; w/ help; perf rept (disk)	13013
DECIMALS	5 - 8	Diag placement, pract, testing in decimals; avail in pkg or separate	13013
BAGELS	4 - 9	Number guessing game; develops problem-solving techniques	13013
20 QUESTION	4 - 9	Number guessing game; gives practice in usen of < and > symbols	13013
PERCT PROBS	4 - 10	Pract w/ basic types % probs; help, diffic lvl opts; perf rept -on disk	13013

PROG NAME	GRADES	DESCRIPTION	ID NO.
MATHEMATICS - BASIC SKILLS (CONT)			
DIVIS FACTS	4 - 9	Drill on divis'n facts; choice of exer's; reports performance -on dsk	13013
HURKLE	5 - 9	User seeks Hurkle on vert, horiz, 1- or 4-quadr graph (disk pkg)	13013
PRIME FACTR	7 - 10	Finds prime factors of positive integer	13014
PERCENTS	6 - 9	Diag placement, pract, testing in percents; avail in pkg or separate	13014
		* * * MATHEMATICS - ALGEBRA * * *	
SQ BINOMIAL	7 - 12	Gives practice in squaring binomials; score given at end	13454
NUM-SERIES	7 - 12	Practice in analyzing number series probs; incr difficulty (8 progs)	13454
SLOPE	9 - 12	Practice on slope and intercept concepts using linear equations	13455
		* * * MATHEMATICS - ANALYSIS * * *	
LIMACN-AREA	10 - 12	Describes, graphs & finds areas of limacons (on disk)	13466
TAYLR APPRX	10 - 12	Graphs funct'ns, Taylor series to show series approx of func's (disk)	13466
POLY GRPH32	10 - 12	Graphs 2 polynom funct'ns; user gives coeff's, axis (disk + 32K)	13466
MULT FUNC32	10 - 12	Graphs 2 circ, abs val, greatst intgr funct's; user coef's, axis(dsk)	13466
FUNC GRPH48	10 - 12	Graphs mult funct'ns of many types w/ user coeff's, axis (disk + 48K)	13466
ARITH FUNCT	10 - 12	Graphs user-entered & 256 pre-programmed functions, esp trig (disk)	13466
SIN/COS FNC	10 - 12	Graphs mult sin/cos funct'ns; shows ampl, per'd, phase shift (on disk)	13466
LIMITS SEQS	10 - 12	Shows graph'ly limits of user-supplied & preprog'd sequences (disk)	13466
		* * * MATHEMATICS - ARITHMETIC * * *	
ADDITION	1 - 5	Diag placement, pract, mast test'g in addition; lge nums;in pkg or sep	13471
SPEED FACTS	1 - 8	Reinforces 4 ops facts; 3 presentation speeds; 1 table or mixed tabls	13471
SKILL GAMES	1 - 9	Twelve programs for drill and practice in four arithmetic operations	13471
WORD PROBS	1 - 6	Six programs which present arithmetic word probs for student sol'n	13471
MATH DRILL	2 - 9	Practice add, sub, mult, div probs; time limit option (in pkg)	13472
ARITH LAWS	3 - 5	Diag placement, pract, test'g in arith laws; lge nums; in pkg or sep	13472
MULTIPLY	3 - 5	Diag placement, pract, mast test'g in mult'n; lge nums; in pkg or sep	13472
MATHGRID	3 - 8	Reinforces multiplic facts, 0-9 by associating grid pts to x,y coords	13472
MULTDIV FUN	3 - 8	Pract w/ 1 table or mixed; scoreb'd display; reviews troublesome prob's	13472
DIVISION	3 - 6	Diag placement, pract, mast test'g in division; lge nums;in pkg or sep	13472
ADD W/CARRY	2 - 6	Vertical add probs; fill in column sum and carry amount (in pkg)	13472
SUBTRACTION	2 - 5	Diag placement, pract, mast test'g in subtract, lge nums;in pkg or sep	13472
ARITH VOCAB	4 - 9	Drill on basic arith vocab; also reviews defin's; perf rept -on disk	13473
LEGACY	4 - 6	A timed drill on multiplication facts in game format	13473
TAKE IT	4 - 9	Drill/game on four basic operat'ns; timed input; varbl diffic'ty lvls	13473
NEG NUMBERS	6 - 8	Diag placement, pract, test'g in negative numbers; avail pkg or sep	13474
		* * * MATHEMATICS - CALCULUS * * *	
MIDPT TRAP	11 - 12	Graphic interpret, numeric evalua'n of Midpoint, Trapezoid rules (disk)	13486
GRAPH INTEG	11 - 12	Shows theory of integ'n w/ graphic displays of rect sums, limit (disk)	13486
		* * * MATHEMATICS - GEOMETRY * * *	
MATH TUTOR2	7 - 12	Pract w/ volumes & areas of geomet figures; also percents; game format	13514

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * MATHEMATICS - STATISTICS * * *	
WHATS SCOR?	6 - 12	Introd's stat'l measures, distributions, histograms, curves (on disk)	13524
		* * * MISCELLANEOUS * * *	
TEACHING	8 - 12	Demonstration of uses and values of educational software	14005
		* * * MISCELLANEOUS - BASIC SKILLS * * *	
PRESCHOOL	K - 1	Teaches vital cognitive skills that children need in school; with guide	14011
MEMORY MYTH	5 - 12	Develops memory skills; variables include image size, ordering, time	14013
		* * * MISCELLANEOUS - GEOGRAPHY * * *	
MAP READING	4 - 10	Presents concepts direction, distance; step-by-step scale exer's	14703
		* * * SCIENCE - BASIC SKILLS * * *	
SCIENT METH	5 - 10	Covers observ'n, generaliza'n, measurem't, verific'n; simul's expermt	16013
		* * * SCIENCE - STATISTICS * * *	
WHATS SCOR?	6 - 12	Introd's stat'l measures, distributions, histograms, curves (on disk)	16524
		* * * SCIENCE - BIOLOGY * * *	
CIRCULATION	4 - 8	Covers functions, princ circulatory syst organs; animatd grafix; on dsk	16573
COMPETE	9 - 12	User may study interactions between real and hypothet flowering plants	16575
EVOLUT	10 - 12	Explores factors involved in evolution by inherited variations	16576
LINKOVER	10 - 12	User may do genetic mapping exper's with emphasis on linkage, x-over	16576
		* * * SCIENCE - CHEMISTRY * * *	
TITRATION	10 - 12	Simulates typical acid-base titrations (on disk)	16586
RKINET	10 - 12	User may study effects of various factors on reaction kinetics	16586
HABER	10 - 12	User studies effects various factors on prod'n NH4 by Haber process	16586
		* * * SCIENCE - ECOL/ENV SCI * * *	
ODELL1	7 - 12	Simulates a food chain in game setting; student is fish (disk pkg)	16604
COMPETE	9 - 12	User may study interactions between real and hypothet flowering plants	16605
ECOL MODEL	10 - 12	Explores factors affecting popul'n growth, simple to complex situat'ns	16606
		* * * SCIENCE - PHYSICS * * *	
INTERP	10 - 12	User explores science' use of models w/ emph on wave theory of light	16656
SCATTER	10 - 12	User does exper's w/ particle scattering due to different materials	16656
NEWTON	10 - 12	User studies predict'n of satellite orbits w/ Newton's laws	16656
MILLIKAN	11 - 12	Simulated lab; students perform Millikan oil drop exper (on disk)	16656
		* * * SOCIAL SCIENCE - STATISTICS * * *	
WHATS SCOR?	6 - 12	Introd's stat'l measures, distributions, histograms, curves (on disk)	17524
		* * * SOCIAL SCIENCE - GEOGRAPHY * * *	
U.S. MAP	3 - 9	State and/or capital identification from map of United States (in pkg)	17702

APPLE II SOFTWARE

PROG NAME	GRADES	DESCRIPTION	ID NO.
SOCIAL SCIENCE - GEOGRAPHY (CONT)			
WORD-GEOG	6 - 9	Generates scrambled word patterns containing geographical place names	17704

COMMODORE PET SOFTWARE

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * BUSINESS - ACCT'G/BOOK'G * * *	
GEN LEDGER	10 - 12	Provides practice in using accounting without drudgery of hand work	01026
DEPRECIATE	10 - 12	Calculates depreciation by three methods; also displays schedule	01026
		* * * BUSINESS - BUSINESS MATH * * *	
BANK	7 - 11	Shows princ's installment buying, long-term loans, sav'g acct -in pkg	01044
SAVINGS	8 - 12	Finds bal'c of sav acct for yearly investm't or mthly deposit -in pkg	01045
LOAN	8 - 12	For instal loan, finds mthly inter, payment & balance due (in pkg)	01045
BANK RECON	9 - 12	Program reconciles a bank statement given balances, checks, and charges	01045
LOAN AMORT	10 - 12	Complete loan analysis program -all loan related options available	01046
ANNUITIES	10 - 12	Calculates am't that can be accumulated with an initial investment	01046
		* * * BUSINESS - BUSINESS PRNC * * *	
MARKET	8 - 12	2 teams compete in bike sales; manage advert, prod lvl, prices-in pkg	01055
		* * * BUSINESS - TYPING * * *	
PROTYPE	6 - 12	Teaches typists to produce 55wpm in 1/3 time of traditional instruction	01104
		* * * COMPREHENSIVE * * *	
READABILITY	1 - 12	Determine readibility of text based on word/sent length, word diffic'ty	03001
GRADE AVGS	1 - 12	Input num or letter grades to get average, rank, & summary of grades	03001
WORD SEARCH	1 - 12	Teacher types any 8 word categor's, players pick matching categories	03001
WAR QUIZ	3 - 12	Quiz on Revolutionary War which can be modified for any topic	03002
STUDY DRILL	3 - 12	Create a study drill for any subject by entering questions& answers	03002
SAP	8 - 12	Does statis'l analy's of survey results; for stud't projs (in pkg)	03005
		* * * COMPREHENSIVE - BASIC SKILLS * * *	
MEM-BUILDER	1 - 6	A series of educ games to improve memory,attn span, and concentration	03011
		* * * COMPUTER SCIENCE/LITERACY - BASIC SKILLS * * *	
INTRO MICRO	3 - 9	Six programs which help students acquire computer literacy skills	04012

PROG NAME	GRADES	DESCRIPTION	ID NO.
COMPUT.. SCIENCE/LITERACY - BASIC SKILLS (CONT)			
ELIZA	4 - 12	Computer plays psychoanalyst and responds to your input (in pkg)	04013
		* * * COMPUTER SCIENCE/LITERACY - COMPUTER PROG * * *	
STEP BYSTEP	8 - 12	32 progs with workbook; teaches a beginner BASIC language (on disk)	04125
		* * * ENGLISH - BASIC SKILLS * * *	
COLETT	K - 1	Counting and recognizing letters which are displayed on screen	06011
FOLDIR I	K - 3	Direct'nal concepts of left, right, up, down, on, off, top, bottom, etc	06011
LET REC2	K - 1	Lower case letter recognition from list of three choices	06011
JUMBLE RACE	1 - 6	Teacher enters words to be unscrambled in order to win car race	06011
HANGMAN	1 - 8	Word guessing game; can substitute any set of words	06011
ALPHABET	K - 2	Student names the next letter in the alphabet; races with computer	06011
BASEBL SPEL	1 - 6	Student moves ahead in baseball by recognizing correctly spelled words	06011
FOLDIR II	K - 3	Develops concepts of time, comparisons, top-middle-bottom, addition	06011
TIC JUMBLE	1 - 6	Teacher enters 20 words; two play Tic-tac-toe by unscrambling words	06011
ALPHA ROCKT	1 - 6	Student advances rocket to moon by correctly alphabetizing words	06011
LETTERS	K - 1	Cap letter and number recognition; multiple choice from list of three	06011
SPELL-FIND	1 - 6	Teacher enters 20 words; student finds the missing letter in word	06011
LOOK N SPEL	1 - 6	Teacher enters 20 words; student retypes word when it disappears	06011
LETTER-MTCH	K - 1	Student matches letter on screen; has a race with computer	06011
FLASHSPEL'G	1 - 6	Student tries to spell word flashed on screen; extra time given if nec	06011
SPELLING-A	2 - 2	Long and short vowels, and words with "r","y","wh","oo" (7 tapes)	06012
HANGMAN	3 - 9	Guess a secret word selected by computer or friend (in pkg)	06012
A & AN	3 - 6	Fill in a/an before noun; Fonz rewards rt ans; help after 2 wrong	06012
SPELL'G BEE	3 - 10	Word flashed for set interval, user types it; words changed easily	06012
SWAP	3 - 7	Alphabetize 2-8 words, moving 2 per time; program tracks least moves	06012
SPELLING-B	3 - 3	Vowels & consonants, 2-syl words, homonyms, compound words (7 tapes)	06012
WORD MASTER	4 - 7	Guess 3-let'r word; teaches reasoning & vocab (in pkg)	06013
SPELLING-C	4 - 4	Vowels, word endings, 2-syl words, homonyms & compounds (7 tapes)	06013
STORY BLDR	4 - 7	Partial verse is presented; child fills in missing parts (in pkg)	06013
SCRAMBLE	4 - 9	Two students compete to unscramble letters to form word	06013
SPELLING-D	5 - 5	Vowels, word endings, prefixes, suffixes, 3 & 4 syllables (7 tapes)	06013
VOCABULARY2	7 - 12	Seq to VOCAB1; harder questions on synonyms and antonyms (11 progs)	06014
SPELLING-E	6 - 6	Vowels, compounds, prefixes, suffixes, 2-syllable words (7 tapes)	06014
VOCAB GR 7	7 - 7	Mult choice quest's on word mean'g; drill w/ clues/quiz; 5 cass @ $20ea	06014
SPELL GR 7	7 - 7	User chooses which of 5 words misspelled; drill/quiz; 10 cass @$20ea	06014
VOCABULARY1	7 - 12	Questions on synonyms and antonyms; last lesson is a test (11 progs)	06014
VOCAB GR 9	9 - 9	Mult choice quest's on word mean'g; drill w/ clues/quiz; 5 cass @ $20ea	06015
VOCAB GR 8	8 - 8	Mult choice quest's on word mean'g; drill w/ clues/quiz; 5 cass @ $20ea	06015
SPELL GR 9	9 - 9	User chooses which of 5 words misspelled; drill/quiz; 10 cass @$20ea	06015
SPELL GR 8	8 - 8	User chooses which of 5 words misspelled; drill/quiz; 10 cass @$20ea	06015

PROG NAME	GRADES	DESCRIPTION	ID NO.
ENGLISH - BASIC SKILLS (CONT)			
SPELL GR 11	11 - 11	User chooses which of 5 words misspelled; drill/quiz; 10 cass @$20ea	06016
VOCAB GR 11	11 - 11	Mult choice quest's on word mean'g; drill w/ clues/quiz; 5 cass @ $20ea	06016
SPELL GR 10	10 - 10	User chooses which of 5 words misspelled; drill/quiz; 10 cass @$20ea	06016
VOCAB GR 10	10 - 10	Mult choice quest's on word mean'g; drill w/ clues/quiz; 5 cass @ $20ea	06016
SPELL GR 12	12 - 12	User chooses which of 5 words misspelled, drill/quiz; 10 cass @$20ea	06017
VOCAB GR 12	12 - 12	Mult choice quest's on word mean'g; drill w/ clues/quiz; 5 cass @ $20ea	06017
		* * * ENGLISH	
CONWAR	1 - 4	Game of War; players determine correct form for contractions	06161
HOMONYMS	1 - 8	Student picks the right word for the blank; prg gives summary at end	06161
CONCEN SYAN	1 - 6	Game of Concentration with synonyms and antonyms; two players, 3 levels	06161
USAGE BONER	1 - 8	Focus on common mistakes made in English usage (15 tapes)	06161
MAKE A SENT	1 - 1	Unscramble words to make a sentence; six possible sentences	06161
ANTONYMS	1 - 6	Drill and practice in choosing antonyms; summary given	06161
RHYME WAR	1 - 3	Game of war; players determine if 2 words rhyme; short and long vowels	06161
HOMONYMS	1 - 6	Drill and practice in choosing homonymns; summary given	06161
SPEED READ	1 - 6	User reproduces words flashed on screen at five different speeds	06161
RUN-ON SENT	3 - 6	User divides group of words into 2 sentences; race with computer	06162
SUBJ-VERB	2 - 8	User chooses correct verb for subject; has race with steam engine	06162
READ-COMP	3 - 9	Student picks the one word in four that doesn't belong in grp(10 prgs)	06162
WORD-DEMONS	2 - 6	Practice in usage of there/their/they're and to/too/two (2 tapes)	06162
CONTRACTION	2 - 4	Race game for two; players enter contractions for designated words	06162
SYLLABLES	3 - 6	Teacher enters 20 words to be separated into syllables w/ accents	06162
PREFIXES	5 - 8	Instr and pract in using prefixes; will help vocab, reading & spelling	06163
NOUNS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
ADJECTIVES	4 - 9	Text materials & examples given, then quiz on skill (2 cassettes)	06163
SYNONYMS	4 - 9	Prog displays word chosen randomly from list; user enters synonym	06163
CODE BREAKR	5 - 12	Three scrambled message games; easy to hard	06163
PART OF SP	4 - 9	User gives part of speech in mult choice quest's; help after 2 errors	06163
PRONOUNS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
CONTRACTION	4 - 9	Text material, examples, & quiz on contractions (2 cassettes)	06163
HAIKU	5 - 12	You & computer create haiku poetry; comp has phrase library (in pkg)	06163
ADVERBS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
VERBS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
ANALOGIES	7 - 12	Characteristics of analogies and how to analyze them (6 programs)	06164
SYN/ANTONYM	6 - 12	Text material, examples and quiz on synonyms & antonyms (2 cassettes)	06164
HOMONYMS	6 - 12	Text material, examples, and quiz on homonymns & homographs (2 cass)	06164
		* * * FINE ARTS - MUSIC * * *	
TREBLE CLEF	K - 6	Teaches lines and spaces of treble clef; test given; uses CB2 sound	07201
MUSIC-RHYTH	1 - 6	User matches a rhythm using space bar; requires CB2 sound	07201

PROG NAME	GRADES	DESCRIPTION	ID NO.
FINE ARTS - MUSIC (CONT)			
MUSIC-NOTES	1 - 6	User decides if 2nd note is higher, same, lower than 1st note(w/sound)	07201
		* * * FOREIGN LANGUAGE - FRENCH * * *	
FRENCH	5 - 12	Vocabulary builder for beginning French student; nouns/verbs -2 prgs	08223
		* * * MATHEMATICS - BASIC SKILLS * * *	
SHAPE REC	K - 1	Child chooses same shape as the given one from choice of three	13011
MATH DRILL	1 - 8	Practice in add'n, subtr, multipl; with graphics; user controls level	13011
NUMBERS	K - 1	Student must identify numeral from list of three to match given one	13011
MATH SEQ'S	1 - 6	Pract, test'g, perf rec'ds, 4aritho ps & laws, neg nos., fract's, dec's	13011
COSHAPE	K - 1	Counting shapes of one kind that appear on screen	13011
NUMBER	K - 1	Student fills in missing digit between one and nine; summary given	13011
MATPIE	K - 3	Pick the missing part that will complete the partial rectangle	13011
CHANGE MAKE	1 - 6	Provides practice in making change using U.S. coinage	13011
LOOK COUNT2	K - 1	Student counts how many objects are on the screen; no more than ten	13011
LOOK COUNT1	K - 1	Student counts how many objects are on the screen; no more than five	13011
VISDIC	K - 1	4 geomet shapes are shown; object is to choose the 1 that's different	13011
BAGELS	3 - 9	Logic game in which user tries to guess a 3-digit number given clues	13012
INTRO DEC	2 - 5	Computation practice using decimals, esp for slow learners	13012
BATNUM	3 - 9	Battle of numbers strategy game; like Nim; uses graphics (in pkg)	13012
STONES	3 - 12	Logic game in which user tries to pick up last stone (like Nim)	13012
PLACE VALUE	3 - 7	Introduction to basics of decimal number system & place value	13012
CHANGE	3 - 9	Subtract'n to make change; to $100; program makes change in coins if rt	13012
ADDITION	3 - 8	Practice with columnar addition; 4 difficulty levels (in pkg)	13012
BAGELS	3 - 8	User guesses numerals in 3-digit numbers from logical clues (in pkg)	13012
INSOLATION	2 - 6	Game of logic and math skill	13012
HURKLE	3 - 8	User guesses location of Hurkle on grid given compass clues (in pkg)	13012
DECIMALS	4 - 9	Introduces decimal numbers, then drills on concepts introduced	13013
FRACTIONS	4 - 8	Auto placement, pract, testing in fractions; avail in pkg or separate	13013
FRACTIONS	4 - 8	Introduces concept of fractions with numerous graphic illustrations	13013
CHEMIST	5 - 9	Use ratios to find ans, avoid being blown up; if lose, prog gives help	13013
DECIMLS +&-	4 - 9	Columnar dec'l add'n, subtr'n,whole nums to .01's; ans entry rt to left	13013
DECIMAL-%	5 - 9	Convers betw decimals & %'s; gives graphix tutor'l after 2 wrong ans's	13013
FRACT'N +&-	4 - 9	Add'n, subtr'n of fract'ns; tut'l after 2 wrong ans; chks ans reduc'n	13013
DECIMALS	5 - 8	Diag placement, pract, testing in decimals; avail in pkg or separate	13013
FACTOR	5 - 9	Game which encourages the learning of factoring princ's (like Taxman)	13013
FIND FACTRS	4 - 9	Given sum, product of 2 nos., find the numbers; 2 levels: 1-10, 1-100	13013
MIXNUM	5 - 6	Changing improper fractions to mixed numbers and vice versa	13013
NIM	6 - 12	Play against computer; specify no., size of piles & win option (in pkg)	13014
PERCENTS	6 - 9	Diag placement, pract, testing in percents; avail in pkg or separate	13014
MUGWUMP	6 - 10	Player tries to locate 4 imaginary creatures using x-y coords (in pkg)	13014

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * MATHEMATICS - ALGEBRA * * *	
NUM-SERIES	7 - 12	Practice in analyzing number series probs; incr difficulty (8 progs)	13454
GEOM PROG 2	9 - 11	Geomet progres'ns; common ratio,nth term, sum of progr; scord prob sets	13455
VERBL-RATES	8 - 11	Pract solving word probs involving rates; problem sets with scoring	13455
SIM EQN 2X2	9 - 11	Pract finding solutions to 2 simultaneous equations; scored prob sets	13455
ALGEBRA	8 - 11	Pract in elem alg, signed integers, sets, binomials, factor'g (7 progs)	13455
VERBL-INTER	8 - 11	Pract solving word probs involving simple interest; prob sets, scoring	13455
VERBL-MIXTS	8 - 11	Pract solving word probs involving mixtures; problem sets w/ scoring	13455
SIM EQN 3X3	9 - 11	Pract finding solutions to 3 simultaneous equat'ns; scored prob sets	13455
FORMULA EVL	8 - 11	Pract solv'g implicit relat'nshp for unknown var; prob sets, scoring	13455
VERBAL-WORK	8 - 11	Pract solving word probs involving work rates; prob sets w/ scoring	13455
VARIATIONS	9 - 11	Pract w/ direct, indirect & joint relat'nshps; problem sets w/ scor'g	13455
VERBAL-AGES	8 - 11	Pract solving word probs w/ age relationships; prob sets w/ scoring	13455
GEOM PROG 1	9 - 11	Geomet progres'ns; common ratio,nth term, geomet mean; scored prob sets	13455
VERBAL-NUMS	8 - 11	Pract solving word probs w/ numerical relatnshps; prob sets w/ scor'g	13455
LIN EQUATNS	8 - 11	Pract solv'g simple linear equat'ns for 1 unknown; prob sets w/ scoring	13455
VERBL-DIGTS	8 - 11	Pract solv'g word probs w/ rel'shps among digits of num;scored prb sets	13455
ARITH PROG2	9 - 11	Arith progres'ns; common diffrnc, nth term, sum of prog; scord probs	13455
VERBL-COINS	8 - 11	Pract solving word probs w/ coin values; problem sets w/ scoring	13455
JCGRAPH	8 - 12	Graphs function entered into program by user (in pkg)	13455
VERBAL-GEOM	8 - 11	Pract solving word probs involving simple geometry; prob sets, scoring	13455
ARITH PROG1	9 - 11	Arith progres'ns; common diffrnc, nth term, # terms; scored prob sets	13455
TRIGNMTRY I	10 - 12	Drills basic trig definit's; pract w/ sin/cos probs; scored prob sets	13456
QUADR EQNS	10 - 12	Gives practice in solving quadratic equations; scored prob sets	13456
		* * * MATHEMATICS - ARITHMETIC * * *	
ADDITION	K - 2	Uses numbers 1-10 with graphics to illustrate problems; summary given	13471
SUBTRACTION	K - 2	Uses numbers 1-10 with graphics to illustrate problems; summary given	13471
ADDITION	1 - 5	Diag placement, pract, mast test'g in addition; lge nums;in pkg or sep	13471
WARMATH	1 - 6	Game for two; War with teacher selected problems for individuals	13471
MATH-BID	1 - 7	Pract w/ 4 basic ops; user bids based on est of ability to do probs	13471
NUM STRINGS	1 - 8	Provides practice in adding strings of numbers, varying length	13471
ADD-SUBTRAC	1 - 6	Gives problems using 2- and 3place numbers in columns	13471
SKILL GAMES	1 - 9	Twelve programs for drill and practice in four arithmetic operations	13471
MULT-FACTS	1 - 6	Practice multiplication w/ specific or random problems; w/ summary	13471
STORY(+-)	1 - 6	Mixture of story problems in subtraction and addition	13471
COUNT'EM	K - 1	Student must count objects on the screen	13471
FTBALL MATH	1 - 6	Two players advance in football by answering math problems; 9 levels	13471
MATH RACE	1 - 6	Car race; 2 players answer probs, 4 basic ops, nos. to 100; 9 levels	13471
CONMAT	K - 6	Matching equiv pairs of additions, subtractions; 11 lvls, div & mult	13471
TICMAT	K - 6	Tic-tac-toe regular and with math problems; 12 difficulty levels	13471

PROG NAME	GRADES	DESCRIPTION	ID NO.
MATHEMATICS - ARITHMETIC (CONT)			
ADD-FACTS	1 - 6	Practice addition with specific or random problems; summary given	13471
BASEBL MATH	1 - 6	Two play baseball by answering math problems; add, sub, mul, div to 20	13471
WORD PROBS	1 - 6	Six programs which present arithmetic word probs for student sol'n	13471
TIMES	3 - 6	Multipl'n facts to 9; gives rt ans after 2 wrong; shows time to rt ans	13472
ARITH LAWS	3 - 5	Diag placement, pract, test'g in arith laws; lge nums; in pkg or sep	13472
MULTIPLY	3 - 5	Diag placement, pract, mast test'g in mult'n; lge nums; in pkg or sep	13472
DIVIS DRILL	3 - 6	Divis facts to 90/9; gives rt ans after 2 wrong; shows time to rt ans	13472
DIVISION	3 - 6	Diag placement, pract, mast test'g in division; lge nums;in pkg or sep	13472
COUNTING *S	3 - 6	Student must identify product of rows and columns of stars on screen	13472
SUBTRACTION	2 - 5	Diag placement, pract, mast test'g in subtract, lge nums;in pkg or sep	13472
RUNNING	3 - 6	Game to win a race by doing math problems with an opponent	13472
QUOTIENT QZ	4 - 9	Identify a number given the remainders when divided by 3,5,7; 5 tries	13473
CHIEF	4 - 7	A humorous practice in mixed operations	13473
NEG NUMBERS	6 - 8	Diag placement, pract, test'g in negative numbers; avail pkg or sep	13474
		* * * MATHEMATICS - CONSUMER MATH * * *	
BANK	7 - 11	Shows princ's installm't buying, long-term loans, sav'g acct -in pkg	13494
SAVINGS	8 - 12	Finds bal'c of sav acct for yearly investm't or mthly deposit -in pkg	13495
LOAN	8 - 12	For instal loan, finds mthly inter payment & balance due (in pkg)	13495
		* * * MATHEMATICS - GENERAL MATH * * *	
TARGET MATH	1 - 6	Problems in 4 basic operations; answers given in cartoon form	13501
STOCK SIMUL	6 - 12	Players buy and sell stocks with object being to increase net worth	13504
		* * * MATHEMATICS - GEOMETRY * * *	
GEOM AREAS	9 - 11	Pract finding areas of various plane figures; prob sets w/ scoring	13515
		* * * MATHEMATICS - TRIGONOMETRY * * *	
TRIGNMTRY 2	10 - 12	Pract on rt triangle properties, 6 basic trig functions; scor'd probs	13536
		* * * MISCELLANEOUS * * *	
CONCEN TIME	1 - 6	Vers of Concentrat'n in which times are matched; 2 players, 5 levels	14001
MORSE CODE	3 - 12	Practice sending & receiving Morse code; user supplies 6volt dc buzzer	14002
TEACHING	8 - 12	Demonstration of uses and values of educational software	14005
		* * * MISCELLANEOUS - BASIC SKILLS * * *	
POS N SPACE	K - 2	Child moves objects on screen; develops skill w/ spatial relationshps	14011
CLOCK	K - 3	Practice in telling time on the hour and the half hour	14011
PRESCHOOL	K - 1	Teaches vital cognitive skills that children need in school; with guide	14011
ROBOT	K - 2	Identify missing parts of the body from pictured robots	14011
ANIMALS	1 - 6	Prog guesses animals using classification info entered by user	14011
SAMDIF	K - 1	2 non-geom figures are shown; task is to determine same or different	14011
HEXLETTER	3 - 9	Strategy game; capture more letters than computer or friend (in pkg)	14012

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * SCIENCE - BIOLOGY * * *	
COMPETE	9 - 12	User may study interactions between real and hypothet flowering plants	16575
CELL SIMUL	8 - 12	User must keep cell alive by adjusting substance intake & output	16575
EVOLUT	10 - 12	Explores factors involved in evolution by inherited variations	16576
LINKOVER	10 - 12	User may do genetic mapping exper's with emphasis on linkage, x-over	16576
		* * * SCIENCE - CHEMISTRY * * *	
GAS LAW ANL	10 - 12	Solves many types of gas law prob's in iso-therm, -bar, -vol, gen procs	16586
BOHR ATOM	10 - 12	User explores electrostat attract'n forces in simple atoms (in pkg)	16586
THERMODYN 2	10 - 12	Quest's on gas w/ isobaric compr'n, ht removed; dialog, scored quizzes	16586
EMF OF CELL	10 - 12	Pract finding EMF of electrochemical cells; dialog or scored quizzes	16586
STOICH:GENL	10 - 12	Pract solv'g mixed mass/mass,mass/vol, vol/vol probs; dialog, quizzes	16586
PH CONCEPT	10 - 12	Quest's on pH, pOH; pract w/ log scales; dialog or scored quizzes	16586
GAS LAWS	10 - 12	Reviews Boyle's, Charles', Gay-Lussac's Laws; dialog, quizzes	16586
GEN GAS LAW	10 - 12	Quest'n on behav of gas where all 3 thermo varbls change; dialog,qz's	16586
GM-MOL MASS	10 - 12	Generates inorg comp'ds for determ of molec'r masses; dialog,scord qzs	16586
RKINET	10 - 12	User may study effects of various factors on reaction kinetics	16586
ST:VOL/VOL	10 - 12	Pract solv'g probs on volume/volume relat'nshps; dialog, scored quizzes	16586
MOLALITY	10 - 12	Quest's on gm-molec-mass, molality; dialog or scored quizzes	16586
HABER	10 - 12	User studies effects various factors on prod'n NH4 by Haber process	16586
ST:MASS/MAS	10 - 12	Pract in solv'g probs on mass/mass relat'nshps; dialog, scored quizzes	16586
ST:MASS/VOL	10 - 12	Pract solv'g probs on mass/volume relat'nshps; dialog, scored quizzes	16586
NORMALITY	10 - 12	Quest's on gm-molec/gm-eqv mass, normality; dialog, scored qzs	16586
KINETICS	10 - 12	User studies effects of temp, pH on rate of a 1st-order react'n -in pkg	16586
MOLE CONCPT	10 - 12	Quest's on mole concept, chem formula writing; dialog, scored quizzes	16586
% CONCENT	10 - 12	Pract calcul'g % or fract concentration of solns; dialog or qz's	16586
THERMODYN I	10 - 12	Reviews molar ht capac, Charles' Law, 1st Law of Therm; dialog, qz's	16586
REDOX	10 - 12	User studies methods of determining reducing power of reagents (in pkg)	16586
MOLARITY	10 - 12	Quest's on molarity; review of mole concept; dialog, scored quizzes	16586
TITRATION	10 - 12	User explores problems in typical strong acid-base titration (in pkg)	16586
		* * * SCIENCE - ECOL/ENV SCI * * *	
SURVIVAL	6 - 12	User selects animal from woods and attempts to keep it alive in wild	16604
COMPETE	9 - 12	User may study interactions between real and hypothet flowering plants	16605
ECOL MODEL	10 - 12	Explores factors affecting popul'n growth, simple to complex situat'ns	16606
		* * * SCIENCE - PHYSICS * * *	
PROJECTILE	9 - 12	Simulates projectile motion based on elev angle & velocity entered	16655
VECTORS I	10 - 12	Pract in find'g size, direct'n of result't of 3-5 vectors; dialog,qzs	16656
INTERP	10 - 12	User explores science' use of models w/ emph on wave theory of light	16656
SCATTER	10 - 12	User does exper's w/ particle scattering due to different materials	16656
INELA COLIS	10 - 12	Practice inelastic collision analysis; dialog, quiz gener w/ scoring	16656

PROG NAME	GRADES	DESCRIPTION	ID NO.
SCIENCE - PHYSICS (CONT)			
SPEC HT CAP	10 - 12	Quest's on definit of specific heat capacity; dialog, qz gene: w/scor'g	16656
PHOTEL EFCT	10 - 12	Quest's on analy'g photoelect emiss'n from metal cathodes; dialog,qzs	16656
NEWTON	10 - 12	User studies prpdict'n of satellite orbits w/ Newton's laws	16656
HTS FUS/VAP	10 - 12	Quest's on heats of fusion & vaporization concepts; dialog, qz gener	16656
CALORIMETRY	10 - 12	Pract on calorim princs, esp specif ht capac, enrgy consrv; dialog, qzs	16656
CENTRIP FOR	10 - 12	Pract analyzing motion particle in unif circul motion; dialog, qz gen:	16656
ELECT FIELD	10 - 12	Covers work to xfer charged part'cl betw pts in unif field; dialog,qz's	16656
OPTICS ANLS	10 - 12	Solves variety of probs re images w/ thin lenses, convx/concv mirrors	16656
VECTORS II	10 - 12	Finds magnitude, direction of resultant of concurrent vector system	16656
INCL PLANE	10 - 12	Practice motion analy's of particle on inclined plane; dialog, qz gener	16656
LIN KINEMAT	10 - 12	Pract linear motion, graph analysis concepts; dialog or qz gen w/scor'g	16656
PROJ MOTION	10 - 12	Pract projectile flight analysis concepts; dialog or qz gen w/scor'g	16656
PROJL ANLS	10 - 12	Solves gen'l projectile motion prob for flight time, horiz range, etc	16656
LONGL WAVES	10 - 12	Covers longitud'l waves estab'd in open/closed organ pipes; dialog,qzs	16656
PULEY-MACHS	10 - 12	Pract analzg pulley sys's w/ single to tripl movbl blocks; dialog, qz's	16656
XVERS WAVES	10 - 12	Quest's on standing waves establ'd in wire w/ ends fastnd; dialog,qz's	16656
MOMENT ENRG	10 - 12	Pract lin'r momentum, impulse, kinetic energy concepts; dialog/qz gen	16656
		* * * SOCIAL SCIENCE - ECONOMICS * * *	
KINGDOM	6 - 12	User is ruler of ancient kingdom and must manage people & resources	17694
HMRABI	6 - 10	User manages economy of ancient Sumeria to support max popul -in pkg	17694
		* * * SOCIAL SCIENCE - GEOGRAPHY * * *	
DIRECTIONS	K - 3	Teaches 8 directions of N,S,E,W,NE, SE,NW,SW and estimating of distance	17701
US REGIONS	4 - 7	Drill where user identifies U.S. regions in which states are located	17703
STATES/CAPS	4 - 7	Program drills user on randomly selected states and their capitals	17703
		* * * SOCIAL SCIENCE - HISTORY * * *	
PRESIDENTS	4 - 7	Program drills student on Presidents of the United States	17713
		* * * SOCIAL SCIENCE - POLITIC SCI * * *	
POLSYS	9 - 12	Uses role-play to study process of trying to influ'c City Hall -in pkg	17725
		* * * SOCIAL SCIENCE - SOCIOLOGY * * *	
SAP	7 - 12	Does statis'l analy's of survey results; for student proj's (in pkg)	17744
MASPAR	10 - 12	Studies relat'n betw soc status/org involvem't & polit'l partic(in pkg)	17746

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * BUSINESS - ACCT'G/BOOK'G * * *	
ACCOUNTINGI	9 - 12	Provides basic accounting concepts including double entry -w/ graphics	01025
T-ACCOUNTS	9 - 12	Practice in posting 10 transactions to T-accounts	01025
GEN LEDGER	10 - 12	Provides practice in using accounting without drudgery of hand work	01026
ACCOU..TING2	10 - 12	Introduces journals, ledgers, and financial statements -graphics used	01026
DEPRECIATE	10 - 12	Calculates depreciation by three methods; also displays schedule	01026
		* * * BUSINESS - BUSINESS MATH * * *	
BANK	7 - 11	Shows princ's installment buying, long-term loans, sav'g acct -in pkg	01044
SAVINGS	8 - 12	Finds bal'c of sav acct for yearly investm't or mthly deposit -in pkg	01045
LOAN	8 - 12	For instal loan, finds mthly inter, payment & balance due (in pkg)	01045
BANK RECON	9 - 12	Program reconciles a bank statement given balances, checks, and charges	01045
LOAN AMORT	10 - 12	Complete loan analysis program -all loan related options available	01046
ANNUITIES	10 - 12	Calculates am't that can be accumulated with an initial investment	01046
		* * * BUSINESS - BUSINESS PRNC * * *	
MARKET	7 - 12	Teams make small co. marketing decisions (prod lvl, adv, price) -pkg	01054
MARKET	8 - 12	2 teams compete in bike sales; manage advert, prod lvl, prices-in pkg	01055
		* * * BUSINESS - DATA PROC'NG * * *	
COBOL	9 - 12	Compiles, runs COBOL progs; enables teach'g this lang on micro -on disk	01065
		* * * BUSINESS - TYPING * * *	
MICROTYPING	4 - 12	Practice typing; choice of 9 speeds and number of errors allowed	01103
TYPING	4 - 12	Provides typing practice; includes time response monitoring	01103
TYPING TCHR	4 - 12	Provides typing practice; initial familiariza ion thru keys mastery	01103
PROTYPE	6 - 12	Teaches typists to produce 55wpm in 1/3 time of traditional instruction	01104
		* * * COMPREHENSIVE * * *	
TEACHER	1 - 12	Teacher enters quest's & answers; computer prepares tests & quizzes	03001
FREQ DIST	1 - 12	Displays bar graph giving frequency distribution of grades	03001
READABILITY	1 - 12	Determine readibility of text based on word/sent length, word diffic'ty	03001
GRADE AVGS	1 - 12	Input num or letter grades to get average, rank, & summary of grades	03001
CAIWARE	1 - 12	Facilitates writing tutorial, practice materials on any subject	03001
STATAL	1 - 12	Computes mean, median, & standard deviation for a set of nos. -in pkg	03001
READING ANL	1 - 12	Program analyzes and reports difficulty level of reading material	03001
MASTR LES'N	3 - 12	Drills,tests/scores, any subj; many les'ns av'labl;see also LES'N BUILD	03002
LES'N BUILD	3 - 12	Enables user to create drills, tests for use with MASTR LES'N prog	03002
WAR QUIZ	3 - 12	Quiz on Revolutionary War which can be modified for any topic	03002
SCRIPSIT	7 - 12	Text edit, reformat w/ min manual effort; excel for reports -on disk	03004
WORDSTAR	7 - 12	Text edit, reformat w/ min manual effort; excel for reports -on disk	03004
TEXT PROCES	7 - 12	Text edit, reformat w/ min manual effort; excel for reports -ptr reqd	03004
SAP	8 - 12	Does statis'l analy's of survey results; for stud't projs (in pkg)	03005

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * COMPREHENSIVE - BASIC SKILLS * * *	
MEM-BUILDER	1 - 6	A series of educ games to improve memory,attn span, and concentration	03011
		* * * COMPREHENSIVE - STATISTICS * * *	
BAR GRAPH	4 - 12	Plots bar or line graph for up to six categories (in pkg)	03523
		* * * COMPUTER SCIENCE/LITERACY - BASIC SKILLS * * *	
BDAY ANAL	3 - 6	Program gives statistic about a person based on date of birth	04012
INTRO MICRO	3 - 9	Six programs which help students acquire computer literacy skills	04012
KEYBOARD	3 - 6	Warm-up exercise to familiarize beginning users with keyboard -in pkg	04012
		* * * COMPUTER SCIENCE/LITERACY - COMPUTER PROG * * *	
VIC	7 - 12	Simul's simple computer for learning of machine lang, internal ops	04124
APL-80	7 - 12	Processes, runs APL progs; enables teaching this lang on micro -on dsk	04124
STEP BYSTEP	8 - 12	32 progs with workbook; teaches a beginner BASIC language (on disk)	04125
COBOL	9 - 12	Compiles, runs COBOL progs; enables teach'g this lang on micro -on disk	04125
		* * * ENGLISH - BASIC SKILLS * * *	
LEARN READ	K - 4	Given a word, child matches correct picture from accompany'g pg -in pkg	06011
U-SPELL	1 - 12	Allows teacher to create audio enhanced spelling drill	06011
READING	K - 2	Teaches child to work from left to right by copying 2 numbers (in pkg)	06011
SPELLING I	1 - 6	Six programs that drill students on sixty common primary-reader words	06011
HANGMAN	1 - 8	Word guessing game; can substitute any set of words	06011
LETTER REC	K - 2	Exercise to familiarize child with letters of the alphabet (in pkg)	06011
SPELLING II	1 - 6	Six programs that drill students on sixty common primary reader words	06011
WORD COMPL	K - 2	Word is given, repeated w/ missing ltr; child supplies ltr (in pkg)	06011
SPELL-BOUND	1 - 12	Practice spelling words at diff'nt levels; words can be changed	06011
LEARN SPELL	K - 4	Partial words displayed; child adds ltr to form complete word (in pkg)	06011
SOUNDS LIKE	K - 4	Pract w/ words which sound alike but are spelled differently(in pkg)	06011
WORD RECOG	K - 2	Given a word, child must pick the same word from set of 3 (in pkg)	06011
LEARN WORDS	K - 4	Child must match picture to word; intermed difficulty words (in pkg)	06011
FLASHSPEL'G	1 - 6	Student tries to spell word flashed on screen; extra time given if nec	06011
SPELL QUIZ	3 - 12	Decide which one of 4 words is misspelled and enter correct spelling	06012
ABAGELS	3 - 9	User guesses letters in short words based on logical clues (in pkg)	06012
SPEED-READ	3 - 12	Program to increase and monitor reading speed & comprehension	06012
SPELL GR 4	3 - 8	4th grade spelling test using some commonly misspelled words (in pkg)	06012
HANGMAN	3 - 9	Spelling game; words in data statements can be changed (in pkg)	06012
SPELL TEST	3 - 8	Choose correctly spelled word out of set of misspelled words (in pkg)	06012
ENGLISH	3 - 8	Practice identifying nouns, adjs, or pronouns; keeps & reports score	06012
VOCAB TEST	3 - 8	Choose correct synonym from a list for a given word (in pkg)	06012
MINICROSSWD	3 - 12	Four programs that generate dozens of crossword puzzles	06012
WORD MASTER	4 - 7	Guess 3-let'r word; teaches reasoning & vocab (in pkg)	06013
STORY BLDR	4 - 7	Partial verse is presented; child fills in missing parts (in pkg)	06013

PROG NAME	GRADES	DESCRIPTION	ID NO.
ENGLISH - BASIC SKILLS (CONT)			
SCRAMBLE	4 - 9	Two students compete to unscramble letters to form word	06013
SPELL GR 5	4 - 8	5th grade spelling test using some commonly misspelled words (in pkg)	06013
TACHISTISCP	4 - 12	Pract reproducing phrases flashed on screen; adjustable time (in pkg)	06013
SPELLING	7 - 12	Teaches and drills spelling; with final test (8 progs & audio tape)	06014
VOCABULARY2	7 - 12	Seq to VOCAB1; harder questions on synonyms and antonyms (11 progs)	06014
VOCABULARY1	7 - 12	Questions on synonyms and antonyms; last lesson is a test (11 progs)	06014
		* * * ENGLISH - LITERATURE * * *	
QUOTATIONS	9 - 12	Generates missing-letter puzzles, with clues, using famous quotations.	06155
		* * * ENGLISH - ENGLISH * * *	
STORY TELL	K - 4	Child reads story & reports facts; each run has new key wds (in pkg)	06161
NOUNS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
ADJECTIVES	4 - 9	Text materials & examples given, then quiz on skill (2 cassettes)	06163
MADLIBS	5 - 9	Asks for, checks parts of speech; builds humorous passages (in pkg)	06163
PRONOUNS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
CONTRACTION	4 - 9	Text material, examples, & quiz on contractions (2 cassettes)	06163
ADVERBS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
VERBS	4 - 9	Text material & examples given, then quiz on skill (2 cassettes)	06163
ANALOGIES	7 - 12	Characteristics of analogies and how to analyze them (6 programs)	06164
SYN/ANTONYM	6 - 12	Text material, examples and quiz on synonyms & antonyms (2 cassettes)	06164
HOMONYMS	6 - 12	Text material, examples, and quiz on homonymns & homographs (2 cass)	06164
		* * * FOREIGN LANGUAGE - FRENCH * * *	
WORD-FRENCH	9 - 12	Generates scrambled word patterns containing hidden French words	08225
		* * * FOREIGN LANGUAGE - SPANISH * * *	
WORD-SPANSH	9 - 12	Generates scrambled word patterns containing hidden Spanish words	08275
		* * * GUIDANCE - TESTING * * *	
IQ TEST	4 - 12	Determine your IQ with a test of 60 multiple choice questions	09323
		* * * HEALTH * * *	
DIET	5 - 12	Enter phys'l & diet info; computer analyzes nutritional content-in pkg	10003
RATS	7 - 12	Control rats by sanitation, slow & quick kill poisons (in pkg)	10004
MALARIA	7 - 12	Control malaria epidemic w/ medication,drugs,pesticides,etc(in pkg)	10004
DIET	6 - 12	Retrieves nutrient data to explore adequacy of users diet (in pkg)	10004
MALAR	8 - 12	Investig bio/soc/polit/ecol aspects of malaria epidemic ctrl (in pkg)	10005
RATS	8 - 12	Investigates control of rat population in city or apt (in pkg)	10005
		* * * HOME ECONOMICS * * *	
DIET	5 - 12	Enter phys'l & diet info; computer analyzes nutritional content-in pkg	11003

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * HOME ECONOMICS - FOODS * * *	
DIET PLAN'R	4 - 12	Enter wgt, hgt; determ diet plan; calorie & carbo info given (in pkg)	11373
DIET	5 - 12	Input phy'l & diet info; computer analyzes nutritional content-in pkg	11373
DIET	6 - 12	Retrieves nutrient data to explore adequacy of users diet (in pkg)	11374
		* * * MATHEMATICS - BASIC SKILLS * * *	
MATH DRILL	1 - 8	Practice in add'n, subtr, multipl; with graphics; user controls level	13011
HOW MANY?	K - 3	Prints blocks on screen; child counts blocks & enters no. (in pkg)	13011
MATH SEQ'S	1 - 6	Pract, test'g, perf rec'ds,4 basic ops & laws, neg nos., fract's, dec's	13011
CASH-R	1 - 6	Provides practice in using coins to buy merchandise (in pkg)	13011
MATH K-8	K - 8	Diag,pract,mast test'g;4 arith ops, numeration,frac's,dec's (47 prgs)	13011
CHANGE MAKE	1 - 6	Provides practice in making change using U.S. coinage	13011
NUMERAL REC	K - 2	Exercise to familiarize child with numerals 1 through 9 (in pkg)	13011
BAGELS	3 - 9	Logic game in which user tries to guess a 3-digit number given clues	13012
NUMBER GUES	3 - 6	Student(s) & computer take turns guessing numbers in range 1 to 100	13012
METRIC RDRN	3 - 9	Learning game which gives practice with the metric system	13012
INTRO DEC	2 - 5	Computation practice using decimals, esp for slow learners	13012
STONES	3 - 12	Logic game in which user tries to pick up last stone (like Nim)	13012
PLACE VALUE	3 - 7	Introduction to basics of decimal number system & place value	13012
ADDITION	3 - 8	Practice with columnar addition; 4 difficulty levels (in pkg)	13012
REGROUPING	3 - 9	Ten programs which provide practice using regrouping skills	13012
FRACTIONS	2 - 6	Fractions shown graph'ly w/ numer equivs; pract w/ frac sizes(in pkg)	13012
BAGELS	3 - 8	User guesses numerals in 3-digit numbers from logical clues (in pkg)	13012
DECIMALS	2 - 6	Dec values explained w/ place value emph; conv'g fracs to decs (in pkg)	13012
METRIC BKJK	3 - 9	Game of Blackjack giving practice with the metric system	13012
DECIMALS	4 - 9	Introduces decimal numbers, then drills on concepts introduced	13013
FRACTIONS	4 - 8	Auto placement, pract, testing in fractions; avail in pkg or separate	13013
SETS&NUMBER	4 - 8	Introduction to number theory with graphic illustrations	13013
FRACTIONS	5 - 9	Converting fractions to decimals & back; nums & denoms 1 to 15 -in pkg	13013
FRACTIONS	4 - 8	Introduces concept of fractions with numerous graphic illustrations	13013
DECIMAL SUB	4 - 8	Dec. subtraction in tenths from .1 to 1.2 with number line displayed	13013
DECIMAL ADD	4 - 8	Decimal addition in tenths from .1 to 1.2 with number line displayed	13013
DECIMATION	4 - 9	Add,sub,mult,div of decimal nos. on 4 different levels; w/ time limit	13013
FRAC-MIX NO	4 - 8	Common frac & mixed no. problems solved step by step	13013
DECIMALS	5 - 8	Diag placement, pract, testing in decimals; avail in pkg or separate	13013
FRAC ADD	5 - 9	20 problems in fraction addition; elapsed time printed for each prob	13013
FACTOR	5 - 9	Game which encourages the learning of factoring princ's (like Taxman)	13013
FRAC TO DEC	5 - 9	20 probs converting fractions to decimals; two tries given	13013
COINS	4 - 7	Practice in calculating value of random coin combinations (in pkg)	13013
HURKLE	4 - 9	Player seeks 'Hurkle' using x-y coord's, 1 quadrant only (in pkg)	13013
MATH PAK II	4 - 9	4 basic operations with fractions; immed error check and pos feedback	13013

PROG NAME	GRADES	DESCRIPTION	ID NO.
MATHEMATICS - BASIC SKILLS (CONT)			
METRIC PRE	5 - 12	Tests your knowledge of prefixes in the metric system	13013
PERCENTS	6 - 9	Diag placement, pract, testing in percents; avail in pkg or separate	13014
BASENUM	6 - 12	Practice converting from one base to another; bases 2 to 32 (in pkg)	13014
POINTS	7 - 9	Practice finding x-y coordinates of points in all 4 quadrants (in pkg)	13014
FRAC	6 - 9	Practice on fraction/decimal conversion; word problems (in pkg)	13014
MUGWUMP	6 - 10	Player tries to locate 4 imaginary creatures using x-y coords (in pkg)	13014
		* * * MATHEMATICS - ALGEBRA * * *	
GRAPH BLDR	5 - 10	11 progs & games on coordinate graphing systems; easy to hard	13453
NUM-SERIES	7 - 12	Practice in analyzing number series probs; incr difficulty (8 progs)	13454
PLOT	7 - 12	This program will plot linear equations an x-y graph	13454
ELEM-ALG	8 - 10	Reviews fundamentals of elem alg; interactive; easy to hard problems	13455
CART GRAPHS	8 - 12	Plots a standard x,y graph for a given function to scale (in pkg)	13455
JCGRAPH	8 - 12	Graphs function entered into program by user (in pkg)	13455
ALG QUIZ	8 - 12	Equations in form ax+by+cz=d must be solved for one of the variables	13455
POLAR GRAPH	10 - 12	Plots polar graphs to scale; user enters range & increment (in pkg)	13456
PARAM GRAPH	10 - 12	Graphs parametric functions w/ x & y expressed in terms of T (in pkg)	13456
		* * * MATHEMATICS - ANALYSIS * * *	
REGRESSION	10 - 12	Linear & parabolic regression used for data analysis, graphing -in pkg	13466
		* * * MATHEMATICS - ARITHMETIC * * *	
ADDITION	1 - 5	Diag placement, pract, mast test'g in addition; lge nums;in pkg or sep	13471
NUM STRINGS	1 - 8	Provides practice in adding strings of numbers, varying length	13471
SUBTRACTION	1 - 8	10 levels of difficulty in subtraction of whole numbers (in pkg)	13471
ADD ON	K - 3	Add'n probs w/ solution aided by blocks display for count'g (in pkg)	13471
INTRO MATH	1 - 4	Computation practice, esp for slow learners; add, sub, mult, div probs	13471
ADDITION	1 - 8	10 levels of difficulty in addition of whole numbers (in pkg)	13471
MATH PAK I	1 - 6	Drill on 4 basic ops w/ immed check of inputs and positive reinforcem't	13471
SKILL GAMES	1 - 9	Twelve programs for drill and practice in four arithmetic operations	13471
MATHELP	1 - 6	Gives practice on the 4 basic arithmetic operations (in pkg)	13471
TAKE AWAY	K - 3	Subtr probs w/ solution aided by blocks display for count'g (in pkg)	13471
SPEED DRILL	1 - 8	Drill on four basic operations with time element added	13471
K-8 MATH	K - 8	Diag, pract, mast test'g in 4 arith operations (10 progs, 5 cassettes)	13471
WORD PROBS	1 - 6	Six programs which present arithmetic word probs for student sol'n	13471
MATH RACE	K - 3	1-2 player game w/ simple add probs & animal or vehicle race (in pkg)	13471
MATH RACE 2	K - 3	1-2 player game w/ intermed +, probs; animal/vehicle race (in pkg)	13471
NUMBO-JUMBO	2 - 9	Add, sub, mult & div of integers on 4 levels; probs have time limits	13472
DIVISIONAL	3 - 8	Provides division problems at level of difficulty specified by user	13472
ARITH LAWS	3 - 5	Diag placement, pract, test'g in arith laws; lge nums; in pkg or sep	13472
MULTIPLY	3 - 5	Diag placement, pract, mast test'g in mult'n; lge nums; in pkg or sep	13472
MULT & DIV	3 - 8	Drills on mult and div tables up to 12; 5 difficulty levels (in pkg)	13472

PROG NAME	GRADES	DESCRIPTION	ID NO.
MATHEMATICS - ARITHMETIC (CONT)			
MULT DRILL	2 - 8	Whole no. mult by teaching objs; timing, digit-by-digit corr options	13472
DIVISION	3 - 6	Diag placement, pract, mast test'g in division; lge nums;in pkg or sep	13472
DIVIDE	2 - 6	Problems in short division; reinforces multiplic tables (in pkg)	13472
DRILL	2 - 8	Pract add'n ,subtr, mult, & divis; choice of integers or decimals	13472
MULTIPLY	2 - 6	learning aid, mult tables; adjusts difficulty based on % score -in pkg	13472
ADDITION	2 - 6	Whole no. addition by teaching obj; timing, digit-by-digit corr options	13472
SUBTRACTION	2 - 5	Diag placement, pract, mast test'g in subtract, lge nums;in pkg or sep	13472
MATH PRACT	2 - 8	Add, sub, mult, & div practice; two levels of difficulty	13472
SUBTRACTION	2 - 8	Whole no. subtr by teaching objs; timing, digit-by-digit corr options	13472
FRAC SUBTR	5 - 9	20 problems in fraction subtract'n; elapsed time printed for each prob	13473
NEG NUMBERS	6 - 8	Diag placement, pract, test'g in negative numbers; avail pkg or sep	13474
TENTRATION	6 - 12	Multiplication and division of powers of 10, with time limits	13474
		* * * MATHEMATICS - CALCULUS * * *	
CVAREA	10 - 12	Evaluates defin integ of F(x) for X=A to B; 4 differ approxs -in pkg	13486
		* * * MATHEMATICS - CONSUMER MATH * * *	
BANK	7 - 11	Shows princ's installm't buying, long-term loans, sav'g acct -in pkg	13494
SAVINGS	8 - 12	Finds bal'c of sav acct for yearly investm't or mthly deposit -in pkg	13495
HOUSE ACCT	9 - 12	2 programs: budg/expense analysis, life insurance cost comparison	13495
LOAN	8 - 12	For instal loan, finds mthly inter payment & balance due (in pkg)	13495
		* * * MATHEMATICS - GENERAL MATH * * *	
BATTLESHIP	4 - 8	Game in which student and computer try to locate points on a grid	13503
STOCK SIMUL	6 - 12	Players buy and sell stocks with object being to increase net worth	13504
STOCK MARKT	6 - 10	Student buys & sells shares of five imaginary issues (in pkg)	13504
		* * * MATHEMATICS - GEOMETRY * * *	
ELEM-GEOM	9 - 11	Reviews fundamentals of elem geom; interactive; easy to hard problems	13515
		* * * MATHEMATICS - TRIGONOMETRY * * *	
ELEM-TRIG	10 - 12	Reviews fundamentals of elem trig; interactive; easy to hard problems	13536
		* * * MISCELLANEOUS * * *	
SKETCH	1 - 9	Allows user to draw a picture using direction (up,left, etc) commands	14001
TEACHING	8 - 12	Demonstration of uses and values of educational software	14005
		* * * MISCELLANEOUS - BASIC SKILLS * * *	
PRESCHOOL	K - 1	Teaches vital cognitive skills that children need in school; with guide	14011
ANIMALS	1 - 6	Prog guesses animals using classification info entered by user	14011
CONCENTRATE	3 - 6	Game in which user matches names of animals on a hidden grid	14012
		* * * SCIENCE - ASTRONOMY * * *	
PLANET WGT	6 - 9	Computes object's wgt on any of 7 other planets and our moon	16564

PROG NAME	GRADES	DESCRIPTION	ID NO.
SCIENCE - ASTRONOMY (CONT)			
ORBIT	6 - 10	Computes data on orbits around either earth or sun (4 programs)	16564
		* * * SCIENCE - BIOLOGY * * *	
POP	7 - 12	Examines 3 methods of popul projection; successive refinem't (in pkg)	16574
MALARIA	7 - 12	Control malaria epidemic w/ medication,drugs,pesticides,etc(in pkg)	16574
TAG	9 - 12	User investigates size of wildlife pop via tagging/recovery (in pkg)	16575
GENE1	9 - 12	Simulates trait inheritance according to Mendelian model (in pkg)	16575
COMPETE	9 - 12	User may study interactions between real and hypothet flowering plants	16575
CELL SIMUL	8 - 12	User must keep cell alive by adjusting substance intake & output	16575
HARDY	9 - 12	Leads stud't thru formulat'n HardyWeinberg princ popul genet -in pkg	16575
PHOSYN	8 - 11	Investigates effects of varying CO2 conc & light intens on photosynth's	16575
POP	8 - 12	Enables exploration of 3 mathematical models of pop growth (in pkg)	16575
EVOLUT	10 - 12	Explores factors involved in evolution by inherited variations	16576
LOCKEY	10 - 12	Biochem investig'n of lock and key model of enzyme specificity -in pkg	16576
NZYMC	10 - 12	Investigation of effects of pH, temp, enzyme conc on reaction rates	16576
LINKOVER	10 - 12	User may do genetic mapping exper's with emphasis on linkage, x-over	16576
		* * * SCIENCE - CHEMISTRY * * *	
PCP	10 - 12	Develops skill in find'g % composition of chem compounds (in pkg)	16586
RKINET	10 - 12	User may study effects of various factors on reaction kinetics	16586
HABER	10 - 12	User studies effects various factors on prod'n NH4 by Haber process	16586
		* * * SCIENCE - EARTH SCIENCE * * *	
CLIMATE	8 - 10	User identifies climates & climatic patterns from attributes (in pkg)	16595
		* * * SCIENCE - ECOL/ENV SCI * * *	
STERL	7 - 12	Investigates effectiveness of two methods of pest control (in pkg)	16604
SURVIVAL	6 - 12	User selects animal from woods and attempts to keep it alive in wild	16604
LIMITS	7 - 12	Version of limits to growth world model with five subsystems(in pkg)	16604
BUFFALO	7 - 12	Simulates effects of herd management on buffalo population (in pkg)	16604
RATS	7 - 12	Control rats by sanitation, slow & quick kill poisons (in pkg)	16604
POLUT	6 - 12	Student explores effects of various factors on water quality -in pkg	16604
TAG	7 - 12	Simulates tagging & recovery method used to estim animal popul- in pkg	16604
POLLUTE	7 - 12	Student explores effects of various factors on water qual (in pkg)	16604
BUFLO	8 - 12	Studies effects alternate harvest'g policies on buffalo pop (in pkg)	16605
MALAR	8 - 12	Investig bio/soc/polit/ecol aspects of malaria epidemic ctrl (in pkg)	16605
COMPETE	9 - 12	User may study interactions between real and hypothet flowering plants	16605
STERL2	8 - 12	Compares cost, pesticide & sterile male release for fly ctrl (in pkg)	16605
STERL1	8 - 12	Compares sterile male release & pesticides for fly ctrl (in pkg)	16605
LIMITS	10 - 12	Study of world as dynam system and long-term effects of growth -in pkg	16606
ECOL MODEL	10 - 12	Explores factors affecting popul'n growth, simple to complex situat'ns	16606

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * SCIENCE - PHYSICS * * *	
INTERSTELLR	7 - 12	User may explore space-time effects expected in space travel	16654
PROJECTILE	9 - 12	Simulates projectile motion based on elev angle & velocity entered	16655
SLITS	10 - 12	Simul's Young's double-slit exper, wave theory of light propag -in pkg	16656
INTERP	10 - 12	User explores science' use of models w/ emph on wave theory of light	16656
SCATTER	10 - 12	User does exper's w/ particle scattering due to different materials	16656
SCATR1	10 - 12	Calcul's angul distrib of scattered alpha parts for lab exper (in pkg)	16656
SCATR2	10 - 12	Plots alpha scatr distrib, Thomson, Rutherford, hard sph mods (in pkg)	16656
SCATR3	10 - 12	Plots trajectories of alpha particles, Rutherford model (in pkg)	16656
NEWTON	10 - 12	User studies predict'n of satellite orbits w/ Newton's laws	16656
CHARGE	10 - 12	Simul's Millikan oil drop exper to determine electron charge (in pkg)	16656
		* * * SCIENCE - TECHNOL'GY ED * * *	
SCIENCE	6 - 10	Demos computer uses in science; written for 6th gr sci fair -in pkg	16664
		* * * SOCIAL SCIENCE - CIVICS/GOV'T * * *	
POLICY	10 - 12	Teams take interest grp roles, explore effects society, econ -in pkg	17676
		* * * SOCIAL SCIENCE - CURRENT EVENT * * *	
ENERGY	9 - 12	User may test strategies to solve U.S. energy crisis (in pkg)	17685
FUTURE	9 - 12	User studies effects of govt decisions on energy & pollution -in pkg	17685
LIMITS	10 - 12	Study of world as dynam system and long-term effects of growth -in pkg	17686
EARTH	10 - 12	Access data on 83 nations to test hypoth's re world energy sit-in pkg	17686
		* * * SOCIAL SCIENCE - ECONOMICS * * *	
XINGDOM	6 - 12	User is ruler of ancient kingdom and must manage people & resources	17694
HMRABI	6 - 10	User manages economy of ancient Sumeria to support max popul -in pkg	17694
ECONOMY	8 - 12	User plays role of U.S. President and makes decisions affecting econ	17695
BALPAY	10 - 12	User explores factors affect'g U.S. bal of payments situation (in pkg)	17696
		* * * SOCIAL SCIENCE - GEOGRAPHY * * *	
FOR'GN CAPS	3 - 8	Try to identify capital cities of major countries of world (in pkg)	17702
STATE CAPS	3 - 8	Lists states, then gives capitals one at a time for identif (in pkg)	17702
US REGIONS	4 - 7	Drill where user identifies U.S. regions in which states are located	17703
COUNTRY	4 - 7	Drill on countries and the continents in which they are located	17703
POP CITIES	4 - 9	List the world urban areas according to their population (in pkg)	17703
STATES/CAPS	4 - 7	Program drills user on randomly selected states and their capitals	17703
WORLD AREA	4 - 9	Compare countries with respect to their land areas (in pkg)	17703
EDUQUIZ	4 - 12	Drill or mult choice: capitals,populations, presidents, etc -in pkg	17703
CAPITOLS	4 - 8	Drill on the states and their capitols (in pkg)	17703
WORLD POP	4 - 9	Test your knowledge of most populated countries of the world (in pkg)	17703
WORD-GEOG	6 - 9	Generates scrambled word patterns containing geographical place names	17704

PROG NAME	GRADES	DESCRIPTION	ID NO.
		* * * SOCIAL SCIENCE - HISTORY * * *	
STATE ENTRY	4 - 9	List the states in order of entry into the Union (in pkg)	17713
PRESIDENTS	4 - 7	Program drills student on Presidents of the United States	17713
PRESIDENTS	4 - 9	List the U.S. Presidents in order of their terms of office (in pkg)	17713
LIMITS	7 - 12	Version of limits to growth world model with five subsystems(in pkg)	17714
[illegible]	8 - 12	Explores effects of alternate harvesting policies on buffalo popul'n	17715
[illegible]	8 - 12	Simulates effects of herd management on buffalo population (in pkg)	17715
[illegible]	8 - 12	Explores effects of alternate harvesting policies on buffalo popul'n	17715
		* * * SOCIAL SCIENCE - POLITIC SCI * * *	
PORK BARREL	7 - 12	As a congressman you make political decisions and try to get reelected	17724
ELECT1,2	8 - 12	Explores campaign strateg's in 14 American presid'l elect'ns -in pkg	17725
POLSYS	9 - 12	Uses role-play to study process of trying to influ'c City Hall -in pkg	17725
ELECT3	8 - 12	Simul's electorate behav'r; teams role-play campaign, elect'n -in pkg	17725
		* * * SOCIAL SCIENCE - SOCIOLOGY * * *	
SAP	7 - 12	Does statis'l analy's of survey results; for student proj's (in pkg)	17744
USPOP	7 - 12	Study aspects of pop change:growth, age, and sex distribution (in pkg)	17744
MASPAR	10 - 12	Studies relat'n betw soc status/org involvem't & polit'l partic(in pkg)	17746
USPOP	10 - 12	Student investigates U.S. population trends, their possible effects	17746

SOFTWARE SUPPLIERS

American Analysis Corp.
655 Redwood Highway
Mill Valley, CA 94941

Robert R. Baker, Jr.
5845 Topp Court
Carmichael, CA 95608

The Bottomshelf, Inc.
P.O. Box 49104
Atlanta, GA 30359

Business Microproducts
1838 Catalina Ct.
Livermore, CA 94550

The Byte Shop
14300 Beach Blvd
Westminster, CA 92683

Carta Associates, Inc.
640 Lancaster Avenue
Frazer, PA 19355

Cavri Systems
26 Trumbull Street
New Haven, CT 06511

Computrex Computer Services
P.O. Box 536
Inman, SC 29349

Computer Information Exch.
P.O. Box 159
San Luis Rey CA 92068

CONDUIT
P.O. Box 388
Iowa City, IA 52244

Cook's Computer Company
1905 Bailey Drive
Marshalltown, IA 50158

Creative Computing Software
Dept 301 PO Box 789M
Morristown, NJ 07960

Dallas Pub Schls, Mktg Dept
912 South Ervay
Dallas, TX 75201

Demi-Software
P.O. Box 570
Lynbrook, NY 11563

Educational Activities Inc.
P.O. Box 392
Freeport, NY 11520

Educational Microsystems
P.O. Box 471
Chester, N.J. 07930

Edu-Ware
P.O. Box 346
Maynard MA 01754

Fireside Computing Inc.
5843 Montgomery Road
Elkridge, MD 21227

Glenn Fisher
1517 Holly St.
Berkeley, CA 94703

Hayden Book Co.
50 Essex Street
Rochelle Park NJ 07662

Ideatech
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Sunnyvale, CA 94088

Instant Software
Peterborough, NH 03458

Jensen Software
1589 Blossom Park
Lakewood, Ohio 44107

LNS Software
1002 Indian Head Dr.
Snow Hill, NC 28580

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7594 San Remo Trail
Yucca Valley, CA 92284

Math Software
1233 Blackthorn Pl.
Deerfield, IL 60015

Mentor Software Inc
P.O. Box 791
Anoka, MN 55303

MICRO-ED, Inc.
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Minneapolis, MN 55424

Micro Learningware
P.O. Box 2134
Mankato, MN 56001

Micro-Music, Inc.
309 W. Beaufort
Normal, IL 61761

Microphys
2048 Ford St.
Brooklyn, NY 11229

Micro Power & Light
13773 N. Central Exp
Dallas, TX 75243

MicroPro International
99 Fourth St.
San Rafael, CA 94901

Microsoft Consumer Products
10800 N.E. Eighth
Bellevue, WA 98004

Milliken Publishing Company
1100 Research Blvd.
St. Louis, MO 63132

Minn Educ Comp Consort Pub
2520 Broadway Drive
Lauderdale, MN 55113

National Software Mktg.,Inc
4701 McKinley Street
Hollywood, FL 33021

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11 Idar Court
Greenwich, CT 06830

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Commack, NY 11725

Project LOCAL
200 Nahatan Street
Westwood, MA 02090

Radio Shack - Software Dept
One Tandy Center
Fort Worth, TX 76102

The Software Exchange
6 South St. Box 68
Milford, NH 03055

Software Industries
902 Pinecrest
Richardson, TX 75080

Tycom Associates
69 Velma Ave.
Pittsfield, MA 01201

UNICOM Div of United Camera
297 Elmwood Ave.
Providence, RI 02907

Whitney Educational Serv's
2071 Tenth Ave.
San Francisco CA 94116

GLOSSARY

Definitions are given here for some of the terms used in this directory, mostly to categorize programs, which might not be familiar to the reader. The abbreviated forms given in parentheses following some of the terms are those used in the Software Description section beginning on page 3.

AUTHOR LANGUAGE (AUTHOR LANG) - Computer is used to translate a language which allows one to create tutorial and drill/practice dialogs without knowing how to program a computer.

COMPUTATIONAL SUPPORT (COMP SUPPORT) - Computer's speed and storage capacity are used to do jobs which would consume much time if done manually (e.g., statistical calculations) and thereby free up students and/or teacher to concentrate on principles being taught.

CONCEPT DEMONSTRATION (CONCEPT DEMO) - Computer is used to illustrate, usually dynamically, the operation of a principle, e.g., daily compounding of interest, a function approaching a limit, etc.

DATA BASE RETRIEVAL (DATA RETR'VAL) - Computer is used to place at student's disposal a large body of data about a given situation (e.g., census or election results) as a laboaratory for testing of alternate hypotheses to explain a phenomenon in the situation, e.g., why one section of the country has traditionally given strong suppport to a particular political party.

EDUCATIONAL GAME (EDUC'L GAME) - Computer plays, or provides computational support for, a game in which one or more students participates and in the process learns new concepts or skills.

IN PKG (also simply "pkg") - The program so described is distributed only as part of a collection of programs; it usually cannot be purchased separately.

LANGUAGE PROCESSOR (LANG PROCESSOR) - The computer is used to translate a language (e.g., BASIC, FORTRAN, PILOT) which enables a program author to more easily communicate with the computer than might be possible otherwise. Various types of language processors exist, including compilers, interpreters, and assemblers.

LONG-TERM PROJECT (LNG TERM PROJ) - The student writes a significant computer program as part of a major project lasting several weeks or months, the purpose being to increase the student's understanding of concepts in a disciplinary area, e.g., physics, as well as his or her understanding of higher level computer applications. Examples of such programs are games such as Lunar Lander, data base retrieval programs to assist in testing hypotheses, and simulations of various physical and biological processes.

MACHINE LANGUAGE (Machin) - The internal language of the computer; usually the machin language of one type of computer is not intelligible to another type of computer. Most microcomputer systems are equipped to run programs written in their own machine language without the use of a language processor.

ON DISK (also "on disk", "disk", or simply "dsk") - The program or package so described is distributed only on diskette,or a disk drive is required for its operation.

ROTE DRILL - The computer is used to administer drills to help students learn material requiring little or no new skills, e.g., dates, arithmetic tables, etc. The computer provides immediate feedback regarding correctness of student responses; it also may report over-all performance.

SKILLS PRACTICE (SKILLS PRACT) - The computer is used to provide exercises enabling the student to practice new skills such as factoring, conversion between metric units, musical pitch discrimination, etc. Immediate feedback is given to the student regarding his or her responses. A program also may record and report performance.

TEACHER AID - The computer is used to serve the teacher in ways which will improve his or her efficiency, especially by saving time. This may include recording and reporting of marks, statistical analysis of grades and other kinds of data, etc.

TEXT PROCESSOR (TEXT PROCES'R) - Also known as word processor. The computer is used to edit and reformat blocks of text such as stories, reports, or letters. It has the tremendous advantage of enabling extensive rework of a document with only one entry of the material. Therefore, it offers great potential for use by students for whom the physical act of writing is a barrier because of limited dexterity skills or other conditions.

TUTORIAL - This is what has traditionally been known as CAI. The computer is used to implement most of the instructional process. A comprehensive tutorial system may contain provisions for all of the following: student placement, introduction of new material, drill, practice, performance monitoring, remediation, and reporting of progress.

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